

25th ANNIVERSARY ISSUE

**THRILLING
WONDER
STORIES**

FEATURING

THE GOLDEN HELIX

by Theodore Sturgeon

TIME PAWN

by Philip K. Dick

SUMMER 25¢



A THRILLING
PUBLICATION



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TWENTY-FIFTH ANNIVERSARY NUMBER

THRILLING Wonder STORIES

VOL. XLIV, NO. 1 A THRILLING PUBLICATION SUMMER ISSUE

TWO FEATURED NOVELS

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Lost in space, they attempted to make a new life for themselves on an old planet—and found out that they were evolving in reverse!
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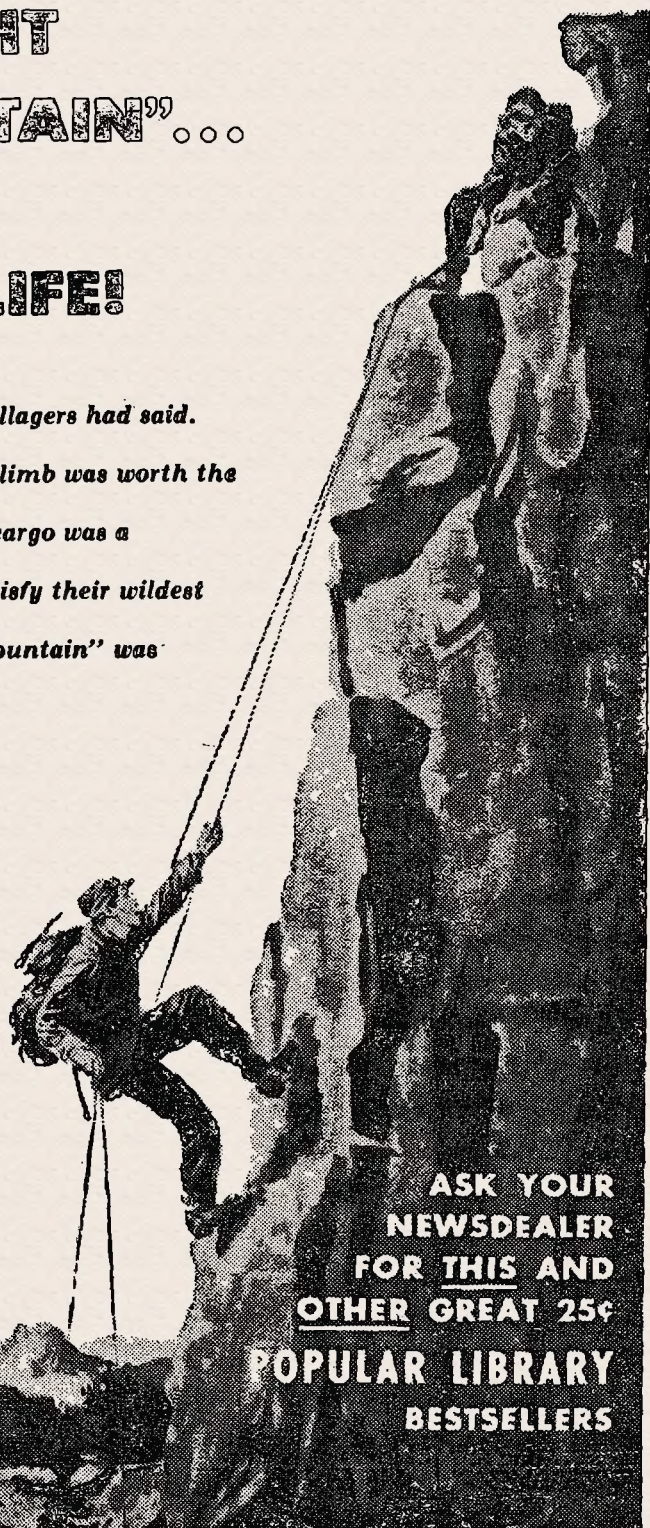
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A DEPARTMENT FOR SCIENCE FICTION FANS

Our Twenty-fifth Anniversary

NO BIRTHDAY CAKE.

No candles.

No party.

But we're proud just the same. This is **THRILLING WONDER'S** twenty-fifth birthday. Twenty-five years of continuous publication makes this the second oldest science fiction magazine in existence. We have active readers who remember and preserve those first Gernsback issues, when the magazine was called **SCIENCE WONDER STORIES**. And, of course we have brand new readers, paint jobs still shiny, who have just discovered the magazine and have no inkling of its long and honorable past.

We've come a long way in those years. The first stories, tip-toeing into the realm of prediction, were afright with their own temerity at suggesting such wild fantasies as travel to another planet. Today, space travel is so much a cliché that it serves only as background, while authors go on to speculate upon possibilities which would have seemed even outside the realm of speculation twenty-five years ago.

Now the news reports have caught up with those first science fiction stories. They are no longer fantastic romances. They are shockingly close to fact. And with so good a score of prediction, we have a strange feeling that the pattern will repeat.

Volume One, Number One!

We were looking, just now, at the contents of Volume One, Number One, of **SCIENCE WONDER STORIES**, dated June, 1929. There were four names represented in the contents still familiar to modern readers: H. G. Wells, with a story called **THE DIAMOND MAKER**, Fletcher Pratt, collaborating with Irving Lester on a two-part serial called **THE**

REIGN OF THE RAY, David H. Keller with **THE THREAT OF THE ROBOT** and Stanton A. Coblentz with **THE MAKING OF MISTY ISLE**. Succeeding issues brought other familiar names along: Jack Williamson with **THE ALIEN INTELLIGENCE**, Ed Earl Repp, Raymond Gallun, P. Schuyler Miller, Ray Cummings, Edmond Hamilton, John Taine, John W. Campbell Jr., Clark Ashton Smith, Eando Binder and Stanley Weinbaum.

The word **SCIENCE** was dropped from the title in June, 1930 and the magazine became **WONDER STORIES**. In August, 1936, it became **THRILLING WONDER STORIES**. The first issue of **THRILLING WONDER STORIES** featured **BLOOD ON THE MOON** by Ray Cummings, **THE DRONE MAN**, by A. Merritt, **THE HORMONE MENACE** by Eando Binder, **THE CIRCLE OF ZERO** by Stanley G. Weinbaum, the **Nth DEGREE** by Mort Weissinger, **REVENGE OF THE ROBOT** by Otis Adelbert Kline, **THE LAND WHERE TIME STOOD STILL** by Arthur Leo Zagat, and **DEATH DIVES DEEP** by Paul Ernst.

The Pete Manx stories by Kelvin Kent, whose identity as Henry Kuttner is no secret, appeared as the thirties came to an end, and at the same time, under his own name, and in collaboration with Arthur Barnes, Kuttner's many-sided genius began to make itself felt. Edmond Hamilton was beginning his career here as a world-wrecker and other names cropped up, names like Horace Gold, Alfred Bester and Willy Ley.

The Golden Age

But the golden age of TWS began in the forties. Now Kuttner had reached the first

(Continued on page 8)



KNOWLEDGE
THAT HAS
ENDURED WITH THE
PYRAMIDS

A SECRET METHOD FOR THE MASTERY OF LIFE

WHENCE came the knowledge that built the Pyramids and the mighty Temples of the Pharaohs? Civilization began in the Nile Valley centuries ago. Where did its first builders acquire their astounding wisdom that started man on his upward climb? Beginning with naught they overcame nature's forces and gave the world its first sciences and arts. Did their knowledge come from a race now submerged beneath the sea, or were they touched with Infinite inspiration? From what concealed source came the wisdom that produced such characters as Amenhotep IV, Leonardo da Vinci, Isaac Newton, and a host of others?

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The **ROSICRUCIANS**

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—(Continued from page 6)

sureness, of maturity and was on the verge of the incredible torrent of talent which was to pour from his typewriter. A GOD NAMED KROO, BABY FACE, SWORD OF TOMORROW, I AM EDEN, WAY OF THE GODS, THE POWER AND THE GLORY—increasing in force as they came.

This was the time too that Ray Bradbury "was born" in TWS, as he put it, with short stories like THE PIPER, PROMOTION TO SATELLITE, ROCKET SKIN, THE IRRITATED PEOPLE, THE SHAPE OF THINGS, AND THE MOON BE STILL AS BRIGHT, THE EARTH MEN, THE SQUARE PEGS, THE OFF SEASON, THE MAN, THE NAMING OF NAMES, KALEIDOSCOPE, A BLADE OF GRASS, and THE CONCRETE MIXER.

Brown and Brackett

Now also came Fred Brown with the memorable DAYMARE and PI IN THE SKY, ALL GOOD BEMS, MOUSE, KNOCK and others. Came Leigh Brackett with THE VEIL OF ASTELLAR, THE MOON THAT VANISHED and THE SEA-KINGS OF MARS.

And Murray Leinster with THE ETERNAL NOW and THINGS PASS BY and THE MANLESS WORLDS and the immortal BOOMERANG CIRCUIT and THE GHOST PLANET and FURY FROM LILLIPUT and so many others.

Almost too many to list—there was DEVILS FROM DARKONIA by Jerry Shelton and its sequel BATTLE OF THE BRAINS and the classic CALL HIM DEMON by Kuttner under the Hammond byline. Now also came Jack Vance with PHALID'S FATE and A.E. van Vogt with THE WEAPON SHOPS OF ISHER and James Blish with LET THE FINDER BEWARE. And here also were Frank Belknap Long and L. Sprague de Camp and Theodore Sturgeon's famous THE SKY WAS FULL OF SHIPS. Began also Margaret St. Clair and George O. Smith. And two novelets in one issue set a mark: JERRY IS A MAN by Robert Heinlein and THE DARKER DRINK by Leslie Charteris.

William Tenn made his bow here with a novelet called CONSULATE and John D. MacDonald with a short titled THAT MESS LAST YEAR. L. Ron Hubbard was writing science fiction then and Damon Knight collaborated with Jim Blish on a story they called THE WEAKNESS OF RVOG. There were Raymond Jones and Arthur C. Clarke and

William Morrison and Cleve Cartmill and William Temple.

It was quite a time. In the fifties MacDonald emerged as a major writer with SHADOW ON THE SAND, Jack Vance began his career as a novelist with OVERLORDS OF MAXUS and SON OF THE TREE and ABERCROMBIE STATION—and now we move into modern times which most of us can remember.

Top stories were NEW BODIES FOR OLD by Jack Vance, SUNDAY IS THREE THOUSAND YEARS AWAY by Raymond Jones, THE VOICE OF THE LOBSTER by Henry Kuttner, TURNCOAT by Damon Knight, MOMENT WITHOUT TIME by Joel Townsley Rogers, THE PLANET MENDER and BOMBS AWRY by George O. Smith and the Manning Draco stories by Ken Crossen.

Despite all the names mentioned, this is the sketchiest sampling of a rich harvest. Looking back on it, we are not much ashamed for ourselves and our predecessors. It's been quite a job. And we like to think it is only a beginning. Stick around for another twenty-five years. Maybe we'll throw a party.

LETTERS FROM OUR READERS

TABU TABU

by John Van Couvering

Dear Mines: A week from finals, a half-done geological report not getting any done-er, 4 a.m. on twelve cups of coffee: and I write fanletters.

You've got a peppy letter column organized. As I'm sure fans are telling themselves every day, fans are people too, unquote; it had to pass that some sapient blue pencil man would get around to softpedaling the shop talk and let minds nurtured on fantasy and exercise in greener pastures.

I'm for it. And by way of commencing, let me note that seldom have I seen a more varied collection of greens, from the chartreuse of sour grapes to the pea green pallor of some rather underdone correspondents who should have hung a little further from the shade.

M. Z. Bradley I have seldom chanced to agree with, tho I kept it to home. Now I find her in a position of unassailable cogency. Nothing more worthwhile than a powerful pedal push in the posterior of certain modern maidens, you should excuse the flight into alliteration. But, in all fairness, everyone's entitled to protection; the situation goes deeper than hypocrisy or lip-service to the Single Standard.

More so than fans. (it should be fen, yes), people are people. Biology, and its immediate consequences, aside, women are, or should be, as human as anyone.

In all history, no concept has been as radical

(Continued on page 123)

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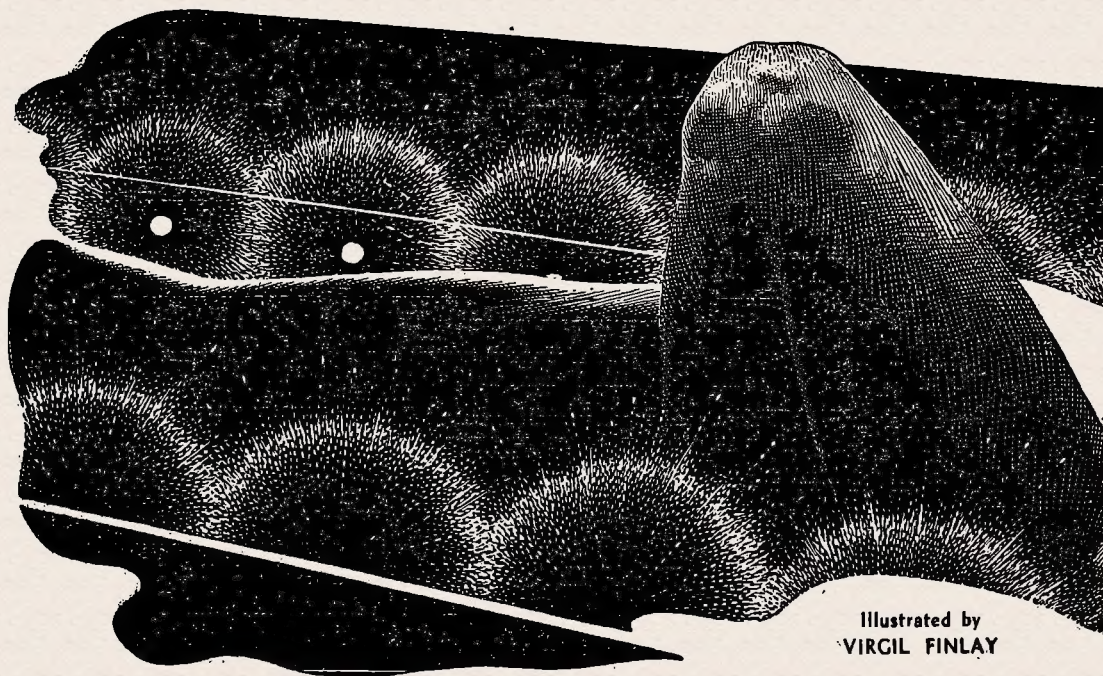
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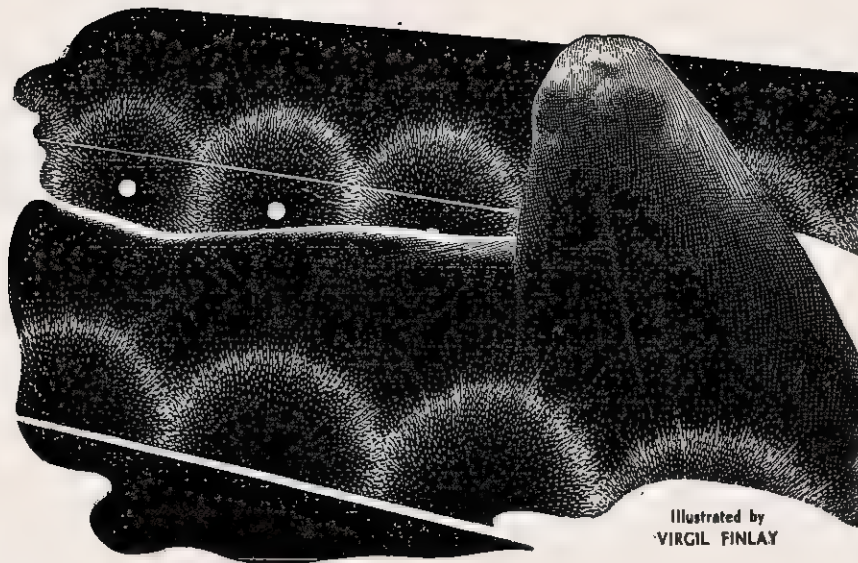
The Golden Helix

A Novel by THEODORE STURGEON

I

TOD awoke first, probably because he was so curious, so deeply alive; perhaps because he was (or had been) seventeen. He fought back, but the manipulators would not be denied. They bent and flexed his arms and legs, squeezed his chest, patted and rasped and abraded him. His joints creaked, his sluggish blood clung sleepily to the walls of his veins, reluctant to move after so long.

He gasped and shouted as needles of cold played over his body, gasped again and screamed when his skin sensitized and the tingling intensified to



Illustrated by
VIRGIL FINLAY

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evolving in reverse. . .*



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make a new life on an old
planet—and found they were
evolving in reverse. . .*

a scald. Then he fainted, and probably slept, for he easily reawoke when someone else started screaming.

He felt weak and ravenous, but extraordinarily well rested. His first conscious realization was that the manipulators had withdrawn from his body, as had the needles from the back of his neck. He put a shaky hand back there and felt the traces of spot-tape, already half fused with his healing flesh.

He listened comfortably to this new screaming, satisfied that it was not his own. He let his eyes open, and a great wonder came over him when he saw that the lid of his Coffin stood open.

He clawed upward, sat a moment to fight a vicious swirl of vertigo, vanquished it, and hung his chin on the edge of the Coffin.

The screaming came from April's Coffin. It was open too. Since the two massive boxes touched and their hinges were on opposite sides, he could look down at her. The manipulators were at work on the girl's body, working with competent violence. She seemed to be caught up in some frightful nightmare, lying on her back, dreaming of riding a runaway bicycle with an off-center pedal-sprocket and epicyclic hubs. And all the while her arms seemed to be flailing at a cloud of dream-hornets round her tossing head. The needle-cluster rode with her head, fanning out behind the nape like the mechanical extrapolation of an Elizabethan collar.

Tod crawled to the end of his Coffin, stood up shakily, and grasped the horizontal bar set at chest level. He got an arm over it and snugged it close under his armpit. Half-suspended, he could then manage one of his feet over the edge, then the other, to the top step. He lowered himself until he sat on it, outside the Coffin at last, and slumped back to rest. When his furious lungs and battering heart calmed themselves, he went down the four steps one at a time, like an infant, on his buttocks.

April's screams stopped.

Tod sat on the bottom step, jackknifed

by fatigue, his feet on the metal floor, his knees in the hollows between his pectorals and his shoulders. Before him, on a low pedestal, was a cube with a round switch-disc on it. When he could, he inched a hand forward and let it fall on the disc. There was an explosive tinkle and the front panel of the cube disappeared, drifting slowly away as a fine glittering dust. He lifted his heavy hand and reached inside. He got one capsule, two, carried them to his lips. He rested, then took a beaker from the cube. It was three-quarters full of purple crystals. He bumped it on the steel floor. The beaker's cover powdered and fell in, and the crystals were suddenly a liquid, effervescing violently. When it subsided, he drank it down. He belched explosively, and then his head cleared, his personal horizons expanded to include the other Coffins, the compartment walls, the ship itself and its mission.

OUT there somewhere—somewhere close, now—was Sirius and its captive planet, Terra Prime. Earth's first major colony, Prime would one day flourish as Earth never had, for it would be a planned and tailored planet. Eight and a half light-years from Earth, Prime's population was composed chiefly of Earth immigrants, living in pressure domes and slaving to alter the atmosphere of the planet to Earth normal. Periodically there must be an infusion of Earth blood to keep the strain as close as possible on both planets, for unless a faster-than-light drive could be developed, there could be no frequent interchange between the worlds. What took light eight years took humans half a lifetime. The solution was the Coffins—the marvellous machine in which a man could slip into a sleep which was more than sleep while still on Earth, and awake years later in space, near his destination, subjectively only a month or so older. Without the Coffins there could be only divergence, possibly mutation. Humanity wanted to populate the stars—but with humanity.

Tod and his five shipmates were hand-picked. They had superiorities—mechanical, mathematical, and artistic aptitudes. But they were not all completely superior. One does not populate a colony with leaders alone and expect it to live. They, like the rest of their cargo (machine designs, microfilms of music and art, technical and medical writings, novels and entertainment) were neither advanced nor extraordinary. Except for Teague, they were the tested median, the competent; they were basic blood for a mass, rather than an elite.

Tod glanced around the blank walls and into the corner where a thin line

Weird Evolution!

WE THINK of evolution as an upward process—as a slow but positive improvement. Nothing says it must be. Evolution can be downward just as well. Or sideways. And no one can say whether its operation is a hit or miss matching of genes, or whether it is part of a plan. But here, in a sensitive story, is a tale of the weirdest evolution of all.

—The Editor

delineated the sealed door. He ached to fling it open and skid across the corridor, punch the control which would slide away the armor which masked the port, and soak himself in his first glimpse of outer space. He had heard so much about it, but he had never seen it—they had all been deep in their timeless sleep before the ship had blasted off.

But he sighed and went instead to the Coffins.

Alma's was still closed, but there was sound and motion, in varying degrees, from all the others.

He glanced first into April's Coffin. She seemed to be asleep now. The needle-cluster and manipulators had withdrawn. Her skin glowed; it was alive

and as unlike its former monochrome waxiness as it could be. He smiled briefly and went to look at Teague.

Teague, too, was in real slumber. The fierce vertical line between his brows was shallow now, and the hard, deft hands lax and uncharacteristically purposeless. Tod had never seen him before without a focus for those narrow, blazing green eyes, without decisive spring and balance in his pose. It was good, somehow, to feel that for all his responsibilities, Teague could be as helpless as anyone.

Tod smiled as he passed Alma's closed Coffin. He always smiled at Alma when he saw her, when he heard her voice, when she crossed his thoughts. It was possible to be very brave around Alma, for gentleness and comfort were so ready that it was almost not necessary to call upon them. One could bear anything, knowing she was there.

Tod crossed the chamber and looked at the last pair. Carl was a furious blur of motion, his needle-cluster swinging free, his manipulators in the final phase. He grunted instead of screaming, a series of implosive, startled gasps. His eyes were open but only the whites showed.

Moirra was quite relaxed, turned on her side, poured out on the floor of the Coffin like a long golden cat. She seemed in a contented abandonment of untroubled sleep.

HE HEARD a new sound and went back to April. She was sitting up, cross-legged, her head bowed apparently in deep concentration. Tod understood; he knew that sense of achievement and the dedication of an entire psyche to the proposition that these weak and trembling arms which hold one up shall *not* bend.

He reached in and gently lifted the soft white hair away from her face. She raised the albino's fathomless ruby eyes to him and whimpered.

"Come on," he said quietly. "We're here." When she did not move, he bal-

anced on his stomach on the edge of the Coffin and put one hand between her shoulder-blades. "Come on."

She pitched forward but he caught her so that she stayed kneeling. He drew her up and forward and put her hands on the bar. "Hold tight, Ape," he said. She did, while he lifted her thin body out of the Coffin and stood her on the top step. "Let go now. Lean on me."

Mechanically she obeyed, and he brought her down until she sat, as he had, on the bottom step. He punched the switch at her feet and put the capsules in her mouth while she looked up at him numbly, as if hypnotized. He got her beaker, thumped it, held it until its foaming subsided, and then put an arm around her shoulders while she drank. She closed her eyes and slumped against him, breathing deeply at first, and later, for a moment that frightened him, not at all. Then she sighed. "Tod. ."

"I'm here, Ape."

She straightened up, turned and looked at him. She seemed to be trying to smile, but she shivered instead. "I'm cold."

He rose, keeping one hand on her shoulder until he was sure she could sit up unassisted, and then brought her a cloak from the clips outside the Coffin. He helped her with it, knelt and put on her slippers for her. She sat quite still, hugging the garment tight to her. At last she looked around and back; up, around, and back again. "We're—there!" she breathed.

"We're *here*," he corrected.

"Yes, here. Here. How long do you suppose we. . ."

"We won't know exactly until we can take some readings. Twenty-five, twenty-seven years—maybe more."

She said, "I could be old, old—" She touched her face, brought her fingertips down to the sides of her neck. "I could be forty, even!"

He laughed at her, and then a movement caught the corner of his eye. "Carl!"

Carl was sitting sidewise on the edge

of his Coffin, his feet still inside. Weak or no, bemused as could be expected, Carl should have grinned at Tod, should have made some healthy, swaggering gesture. Instead he sat still, staring about him in utter puzzlement. Tod went to him. "Carl! Carl, we're here!"

Carl looked at him dully. Tod was unaccountably disturbed. Carl always shouted, always bounced; Carl had always seemed to be just a bit larger inside than he was outside, ready to burst through, always thinking faster, laughing more quickly than anyone else.

He allowed Tod to help him down the steps, and sat heavily while Tod got his capsules and beaker for him. Waiting for the liquid to subside, he looked around numbly. Then drank, and almost toppled. April and Tod held him up. When he straightened again, it was abruptly. "Hey!" he roared. "We're here!" He looked up at them. "April! Tod-o! Well what do you know—how are you, kids?"

"Carl?" The voice was the voice of a flute, if a flute could whisper. They looked up. There was a small golden surf of hair tumbled on and over the edge of Moira's Coffin.

Weakly, eagerly, they clambered up to Moira and helped her out. Carl breathed such a sigh of relief that Tod and April stopped to smile at him, at each other.

Carl shrugged out of his weakness as if it were an uncomfortable garment and went to be close to Moira, to care about Moira and nothing else.

A deep labored voice called, "Who's up?"

"Teague! It's Teague. . . all of us, Teague," called Tod. "Carl and Moira and April and me. All except Alma."

SLOWLY Teague's great head rose out of the Coffin. He looked around with the controlled motion of a radar sweep. When his head stopped its one turning, the motion seemed relayed to his body, which began to move steadily upward. The four who watched him knew inti-

mately what this cost him in sheer will-power, yet no one made any effort to help. Unasked, one did not help Teague.

One leg over, the second. He ignored the bar and stepped down to seat himself on the bottom step as if it were a throne. His hands moved very slowly but without faltering as he helped himself to the capsules, then the beaker. He permitted himself a moment of stillness, eyes closed, nostrils pinched; then life coursed strongly into him. It was as if his muscles visibly filled out a little. He seemed heavier and taller, and when he opened his eyes, they were the deeply vital, commanding light-sources which had drawn them, linked them, led them all during their training.

He looked toward the door in the corner. "Has anyone—"

"We were waiting for you," said Tod. "Shall we . . . can we go look now? I want to see the stars."

"We'll see to Alma first." Teague rose, ignoring the lip of his Coffin and the handhold it offered. He went to Alma's. With his height, he was the only one among them who could see through the top plate without mounting the steps. Then, without turning, he said, "Wait."

The others, half across the room from him, stopped. Teague turned to them. There was no expression on his face at all. He stood quite motionless for perhaps ten seconds, and then quietly released a breath. He mounted the steps of Alma's Coffin, reached, and the side nearest his own machine sank silently into the floor. He stepped down, and spent a long moment bent over the body inside. From where they stood; tense and frightened, the others could not see inside. They made no effort to move closer.

"Tod," said Teague, "Get the kit. Surgery *Lambda*. Moira, I'll need you."

The shock of it went to Tod's bones, regenerated, struck him again; yet so conditioned was he to Teague's commands that he was on his feet and moving before Teague had stopped speaking.

He went to the after bulkhead and swung open a panel, pressed a stud. There was a metallic whisper, and the heavy case slid out at his feet. He lugged it over to Teague, and helped him rack it on the side of the Coffin. Teague immediately plunged his hands through the membrane at one end of the kit, nodding to Moira to do likewise at the other. Tod stepped back, studiously avoiding a glance in at Alma, and returned to April. She put both her hands tight around his left biceps and leaned close. "*Lambda* . . ." she whispered. "That's . . . parturition, isn't it?"

He shook his head. "Parturition is Surgery *Kappa*," he said painfully. He swallowed. "*Lambda's* Caesarian."

Her crimson eyes widened. "Caesarian? Alma? She'd never need a Caesarian!"

He turned to look at her, but he could not see, his eyes stung so. "Not while she lived, she wouldn't," he whispered. He felt the small white hands tighten painfully on his arm. Across the room, Carl sat quietly. Tod squashed the water out of his eyes with the heel of his hand. Carl began pounding knuckles, very slowly, against his own temple.

Teague and Moira were busy for a long time.

II

TOD pulled in his legs and lowered his head until the kneecaps pressed cruelly against his eyebrow ridges. He hugged his shins, ground his back into the wall-panels, and in this red-spangled blackness he let himself live back and back to Alma and joy, Alma and comfort, Alma and courage.

He had sat once, just this way, twisted by misery and anger, blind and helpless, in a dark corner of an equipment shed at the spaceport. The rumor had circulated that April would not come after all, because albinism and the Sirius Rock would not mix. It turned out to be untrue, but that did not matter at the time. He had punched her, punched

Alma! because in all the world he had been given nothing else to strike out at, and she had found him and had sat down to be with him. She had not even touched her face, where the blood ran; she simply waited until at last he flung himself on her lap and wept like an infant. And no one but he and Alma ever knew of it.

He remembered Alma with the space-port children, rolling and tumbling on the lawn with them, and in the pool; and he remembered Alma, her face still, looking up at the stars with her soft and gentle eyes, and in those eyes he had seen a challenge as implacable and pervasive as space itself. The tumbling on the lawn, the towering dignity—these co-existed in Alma without friction. He remembered things she had said to him; for each of the things he could recall the kind of light, the way he stood, the very smell of the air at the time. "Never be afraid, Tod. Just think of the worst possible thing that might happen. What you're afraid of will probably not be *that* bad—and anything else just has to be better." And she said once, "Don't confuse logic and truth, however good the logic. You can stick one end of logic in solid ground and throw the other end clear out of the cosmos without breaking it. Truth's a little less flexible." And, "Of *course* you need to be loved, Tod! Don't be ashamed of that, or try to change it. It's not a thing you have to worry about, ever. You are loved. April loves you. And I love you. Maybe I love you even more than April, because she loves everything you are, but I love everything you were and ever will be."

And some of the memories were deeper and more important even than these, but were memories of small things—the meeting of eyes, the touch of a hand, the sound of laughter or a snatch of song, distantly.

Tod descended from memory into a blackness that was only loss and despair, and then a numbness, followed by a reluctant awareness. He became conscious of what, in itself, seemed the merest

of trifles: that there was a significance in his pose there against the bulkhead. Unmoving, he considered it. It was comfortable, to be so turned in upon oneself, and so protected, unaware and Alma would have hated to see him this way.

He threw up his head, and self-consciously straightened from his foetal posture. *That's over now*, he told himself furiously, and then, dazed, wondered what he had meant.

He turned to look at April. She was huddled miserably against him, her face and body lax, stopped, disinterested. He thumped his elbow into her ribs, hard enough to make her remember she had ribs. She looked up into his eyes and said, "How? How could "

Tod understood. Of the three couples standard for each ship of the Sirian project, one traditionally would beget children on the planet; one, earlier, as soon as possible after awakening; and one still earlier, for conception would take place within the Coffin. But—not *before* awakening, and surely not long enough before to permit of gestation. It was an impossibility; the vital processes were so retarded within the Coffin that, effectively, there would be no stirring of life at all. So— "How?" April pleaded: "How could."

Tod gazed upon his own misery, then April's, and wondered what it must be that Teague was going through.

Teague, without looking up, said, "Tod."

Tod patted April's shoulder, rose and went to Teague. He did not look into the Coffin. Teague, still working steadily, tilted his head to one side to point. "I need a little more room here."

Tod lifted the transparent cube Teague had indicated and looked at the squirming pink bundle inside. He almost smiled. It was a nice baby. He took one step away and Teague said, "Take 'em all, Tod."

H E STACKED them and carried them to where April sat. Carl rose

and came over, and knelt. The boxes hummed—a vibration which could be felt, not heard—as nutrient-bearing air circulated inside and back to the power-packs. “A nice normal deliv— I mean, a nice normal batch o’ brats,” Carl said. “Four girls, one boy. Just right.”

Tod looked up at him. “There’s one more, I think.”

There was—another girl. Moira brought it over in the sixth box. “Sweet,” April breathed, watching them. “They’re sweet.”

Moira said, wearily, “That’s all.”

Tod looked up at her.

“Alma. ?”

Moira waved laxly toward the neat stack of incubators. “That’s all,” she whispered tiredly, and went to Carl.

That’s all there is of Alma, Tod thought bitterly. He glanced across at Teague. The tall figure raised a steady hand, wiped his face with his upper arm. His raised hand touched the high end of the Coffin, and for an instant held a grip. Teague’s face lay against his arm, pillowed, hidden and still. Then he completed the wiping motion and began stripping the sterile plastic skin from his hands. Tod’s heart went out to him, but he bit the insides of his cheeks and kept silent. *A strange tradition*, thought Tod, *that makes it impolite to grieve*. . .

Teague dropped the shreds of plastic into the disposal slot and turned to face them. He looked at each in turn, and each in turn found some measure of control. He turned then, and pulled a lever, and the side of Alma’s Coffin slid silently up.

Good-by. . .

Tod put his back against the bulkhead and slid down beside April. He put an arm over her shoulders. Carl and Moira sat close, holding hands. Moira’s eyes were shadowed but very much awake. Carl bore an expression almost of sullenness. Tod glanced, then glared at the boxes. Three of the babies were crying, though of course they could not be heard through the plastic incubators. Tod was suddenly conscious of Teague’s

eyes upon him. He flushed, and then let his anger drain to the capacious inner reservoir which must hold it and all his grief as well.

When he had their attention, Teague sat cross-legged before them and placed a small object on the floor.

Tod looked at the object. At first glance it seemed to be a metal spring about as long as his thumb, mounted vertically on a black base. Then he realized that it was an art object of some kind, made of a golden substance which shimmered and all but flowed. It was an interlocked double spiral; the turns went round and up, round and down, round and up again, with the texture of the gold clearly indicating, in a strange and alive way, which symbolized a rising and falling flux. Shaped as if it had been wound on a cylinder and the cylinder removed, the thing was formed of a continuous wire or rod which had no beginning and no end, but which turned and rose and turned and descended again in an exquisite continuity. Its base was formless, an almost-smoke just as the gold showed an almost-flux; and it was as lightless as ylem.

Teague said, “This was in Alma’s Coffin. It was not there when we left Earth.”

“It must have been,” said Carl flatly.

Teague silently shook his head. April opened her lips, closed them again. Teague said, “Yes, April?”

April shook her head. “Nothing, Teague. Really nothing.” But because Teague kept looking at her, waiting, she said, “I was going to say it’s beautiful.” She hung her head.

Teague’s lips twitched. Tod could sense the sympathy there. He stroked April’s silver hair. She responded, moving her shoulder slightly under his hand. “What is it, Teague?”

When Teague would not answer, Moira asked, “Did it . . . had it anything to do with Alma?”

Teague picked it up thoughtfully. Tod could see the yellow loom it cast against

his throat and cheek, the golden points it built in his eyes. "Something did." He paused. "You know she was supposed to conceive on awakening. But to give birth—"

Carl cracked a closed hand against his forehead. "She must have been awake for anyway two hundred and eighty days!"

"Maybe she made it," said Moira.

Tod watched Teague's hand half-close on the object as if it might be precious now. Moira's was a welcome thought, and the welcome could be read on Teague's face. Watching it, Tod saw the complicated spoor of a series of efforts—a gathering of emotions, a determination; the closing of certain doors, the opening of others.

Teague rose. "We have a ship to inspect, sights to take, calculations we've got to tune in Terra Prime, send them a message if we can. Tod, check the corridor air."

"The stars—we'll see the stars!" Tod whispered to April, the heady thought all but eclipsing everything else. He bounded to the corner where the door controls waited. He punched the test button, and a spot of green appeared over the door, indicating that with their awakening, the evacuated chambers, the living and control compartments, had been flooded with air and warmed. "Air okay."

"Go on then."

They crowded around Tod as he grasped the lever and pushed. *I won't wait for orders, Tod thought. I'll slide right across the corridor and open the guard plate and there it'll be—space, and the stars!*

The door opened.

There was no corridor, no bulkhead, no armored porthole, no—

No ship!

There was a night out there, dank, warm. It was wet. In it were hooked, fleshy leaves and a tangle of roots; a thing with legs which hopped up on the sill and shimmered its wings for them; a thing like a flying hammer which

crashed in and smote the shimmering one and was gone with it, leaving a stain on the deck-plates. There was a sky aglow with a ghastly green. There was a thrashing and a scream out there, a pressure of growth, and a wrongness.

Blood ran down Tod's chin. His teeth met through his lower lip. He turned and looked past three sets of terrified eyes to Teague, who said, "Shut it!"

Tod snatched at the control. It broke off in his hand.

HOW LONG does a thought, a long thought, take?

Tod stood with the fractured metal in his hand and thought:

We were told that above all things we must adapt. We were told that perhaps there would be a thin atmosphere by now, on Terra Prime, but that in all likelihood we must live a new kind of life in pressure-domes. We were warned that what we might find would be flash-mutation, where the people could be more or less than human. We were warned, even, that there might be no life on Prime at all. But look at me now—look at all of us. We weren't meant to adapt to this! And we can't

Somebody shouted while somebody shrieked, each sound a word, each destroying the other. Something thick as a thumb, long as a hand, with a voice like a distant airhorn, hurtled through the door and circled the room. Teague snatched a folded cloak from the clothing-rack and, poising just a moment, batted it out of the air. It skittered, squirming, across the metal floor. He threw the cloak on it to capture it. "Get that door closed."

Carl snatched the broken control lever out of Tod's hand and tried to fit it back into the switch mounting. It crumbled as if it were dried bread. Tod stepped outside, hooked his hands on the edge of the door, and pulled. It would not budge. A lizard as long as his arm scuttled out of the twisted grass and stopped to stare at him. He shouted at it, and with forelegs much too long for

such a creature, it pressed itself upward until its body was forty five degrees from the horizontal. It flicked the end of its long tail upward, and something flew over its head toward Tod, buzzing angrily. Tod turned to see what it was, and as he did the lizard struck from one side and April from the other.

April succeeded and the lizard failed, for its fangs clashed and it fell forward, but April's shoulder had taken Tod on the chest and, off balance as he was, he went flat on his back. The cold, dry, pulsing tail swatted his hand. He gripped it convulsively, held on tight. Part of the tail broke off and buzzed, flipping about on the ground like a click-beetle. But the rest held. Tod scuttled backward to pull the lizard straight as it began to turn on him, got his knees under him, then his feet. He swung the lizard twice around his head and smashed it against the inside of the open door. The part of the tail he was holding then broke off, and the scaly thing thumped inside and slid, causing Moira to leap so wildly to get out of its way that she nearly knocked the stocky Carl off his feet.

Teaguë swept away the lid of the Surgery *Lambda* kit, inverted it, kicked the clutter of instruments and medications aside and clapped the inverted box over the twitching, scaly body.

"April!" Tod shouted. He ran around in a blind semi-circle, saw her struggling to her feet in the grass, snatched her up and bounded inside with her. "Carl," he gasped, "Get the door."

But Carl was already moving forward with a needle torch. With two deft motions he sliced out a section of the power-arm which was holding the door open. He swung the door to, yelling, "Parametal!"

Tod, gasping, ran to the lockers and brought a length of the synthetic. Carl took the wide ribbon and with a snap of the wrists broke it in two. Each half he bent (for it was very flexible when moved slowly) into a U. He placed one against the door and held out his hand without looking. Tod dropped the ham-

mer into it. Carl tapped the parametal gently and it adhered to the door. He turned his face away and struck it sharply. There was a blue-white flash and the U was rigid and firmly welded to the door. He did the same thing with the other U, welding it to the nearby wall plates. Into the two gudgeons thus formed. Moira dropped a luxalloy bar, and the door was secured.

"Shall I sterilize the floor?" Moira asked.

"No," said Teague shortly.

"But —bacteria. spores."

"Forget it," said Teague.

APRIL was crying. Tod held her close, but made no effort to stop her. Something in him, deeper than panic, more essential than wonderment, understood that she could use this circumstance to spend her tears for Alma, and that these tears must be shed now or swell and burst her heart. *So cry*, he plead silently, *cry for both of us, all of us.*

With the end of action, belated shock spread visibly over Carl's face. "The ship's gone," he said stupidly. "We're on a planet." He looked at his hands, turned abruptly to the door, stared at it and began to shiver. Moira went to him and stood quietly, not touching him—just being near, in case she should be needed. April grew gradually silent. Carl said, "I —" and then shook his head.

Click. Shh. Clack, click. Methodically Teague was stacking the scattered contents of the medical kit. Tod patted April's shoulder and went to help. Moira glanced at them, peerèd closely into Carl's face, then left him and came to lend a hand. April joined them, and at last Carl. They swept up, and racked and stored the clutter, and when Teague lowered a table, they helped get the dead lizard on it and pegged out for dissection. Moira cautiously disentangled the huge insect from the folds of the cloak and clapped a box over it, slid the lid underneath to bring the feebly squirm-

ing thing to Teague. He studied it for a long moment, then set it down and peered at the lizard. With forceps he opened the jaws and bent close. He grunted. "April. . ."

She came to look. Teague touched the fangs with the tip of a scalpel. "Look there."

"Grooves," she said. "Like a snake."

Teague reversed the scalpel and with the handle he gingerly pressed upward, at the root of one of the fangs. A cloudy yellow liquid beaded, ran down the groove. He dropped the scalpel and slipped a watch-glass under the tooth to catch the droplet. "Analyze that later," he murmured. "But I'd say you saved Tod from something pretty nasty."

"I didn't even think," said April. "I didn't . . . I never knew there was any animal life on Prime. I wonder what they call this monster."

"The honors are yours, April. You name it."

"They'll have a classification for it already!"

"Who?"

Everyone started to talk, and abruptly stopped. In the awkward silence Carl's sudden laugh boomed. It was a wondrous sound in the frightened chamber. There was comprehension in it, and challenge, and above all, Carl himself, —boisterous and impulsive, quick, sure. The laugh was triggered by the gush of talk and its sudden cessation, a small thing in itself. But its substance was understanding, and with that an emotional surge, and with that, the choice of the one emotional expression — Carl would always choose.

"Tell them, Carl," Teague said.

Carl's teeth flashed. He waved a thick arm at the door. "That isn't Sirius Prime. Nor Earth. Go ahead, April—name your pet."

April, staring at the lizard, said, "*Crotalidus*, then, because it has a rattle and fangs like a diamondback." Then she paled and turned to Carl, as the full weight of his statement came on her.

"Not—not Prime?"

Quietly, Teague said, "Nothing like these ever grew on Earth. And Prime is a cold planet. It could never have a climate like that," he nodded toward the door, "no matter how much time has passed."

"But what where It was Moira."

"We'll find out when we can. But the instruments aren't here—they were in the ship."

"But if it's a new another planet, why didn't you let me sterilize? What about airborne spores? Suppose it had been methane out there or—"

"We've obviously been conditioned to anything in the atmosphere. As to its composition—well, it isn't poisonous, or we wouldn't be standing here talking about it. Wait!" He held up a hand and quelled the babble of questions before it could fully start. "Wondering is a luxury like worrying. We can't afford either. We'll get our answers when we get more evidence."

"What shall we do?" asked April faintly.

"Eat," said Teague. "Sleep." They waited. Teague said, "Then we go outside."

III

THERE were stars like daisies in a field, like dust in a sunbeam, and like flying, flaming mountains; near ones, far ones, stars of every color and every degree of brilliance. And there were bands of light which must be stars too distant to see. And something was stealing the stars, not taking them away, but swallowing them up, coming closer and closer, eating as it came. And at last there was only one left. Its name was Alma, and it was gone, and there was nothing left but an absorbent blackness and an aching loss.

In this blackness Tod's eyes snapped open, and he gasped, frightened and lost.

"You awake, Tod?" April's small



"There are millions of us," she said, "blowing about in the wind, waiting to give . . ."

hand touched his face. He took it and drew it to his lips, drinking comfort from it.

From the blackness came Carl's resonant whisper, "We're awake. Teague? . . ."

The lights flashed on, dim first, brightening swiftly, but not so fast as to dazzle unsuspecting eyes. Tod sat up and saw Teague at the table. On it was the lizard, dissected and laid out as neatly as an exploded view in a machine manual. Over the table, on a gooseneck, was a flood-lamp with its lens masked by an infra-red filter. Teague turned away from the table, pushing up his "black-light" goggles, and nodded to Tod. There were shadows under his eyes, but otherwise he seemed the same as ever. Tod wondered how many lonely hours he had worked while the two couples slept, doing that meticulous work under the irritating glow so that they would be undisturbed.

Tod went to him. "Has my playmate been talking much?" He pointed at the remains of the lizard.

"Yes and no," said Teague. "Oxygen-breather, all right, and a true lizard. He has a secret weapon—that tail-segment he flips over his head toward his victims. It has primitive ganglia like an Earth salamander's, so that the tail-segment trembles and squirms, sounding the rattles, after he throws it. He also has a skeleton that—but all this doesn't matter. Most important is that he's the analog of our early Permian life, which means (unless he's an evolutionary dead-end like a cockroach) that this planet is a billion years old at the least. And the little fellow here—" he touched the flying thing—"bears this out. It's not an insect, you know. It's an arthropod."

"With wings?"

Teague lifted the slender, scorpion-like pincers of the creature and let them fall. "Flat chitinous wings are no more remarkable a leg adaptation than those things. Anyway, in spite of the ingenuity of his engineering, internally he's pretty primitive. All of which lets us

hypothesize that we'll find fairly close analogs of what we're used to on Earth."

"Teague," Tod interrupted, his voice lowered, his eyes narrowed to contain the worry that threatened to spill over, "Teague, what's happened?"

"The temperature and humidity here seems to be exactly the same as that outside," Teague went on, in precisely the same tone as before. "This would indicate either a warm planet, or a warm season on a temperate planet. In either case it is obvious that—"

"But, Teague—"

"—that a good deal of theorizing is possible with a very little evidence, and we need not occupy ourselves with anything else but that evidence."

"Oh," said Tod. He backed off a step. "Oh," he said again, "sorry, Teague." He joined the others at the food dispensers, feeling like a cuffed puppy. *But he's right, he thought. Like Alma said of the many things which might have happened, only one actually has. Let's wait then, and worry about that one thing when we can name it.*

There was a pressure on his arm. He looked up from his thoughts and into April's searching eyes. He knew that she had heard, and he was unreasonably angry at her. "Damn it, he's so cold-blooded," he blurted defensively, but in a whisper.

April said, "He has to stay with things he can understand, every minute." She glanced swiftly at the closed Coffin. "Wouldn't you?"

There was a sharp pain and a bitterness in Tod's throat as he thought about it. He dropped his eyes and mumbled, "No, I wouldn't. I don't think I could." There was a difference in his eyes as he glanced back at Teague. *But it's so easy, after all, for strong people to be strong, he thought.*

"Teague, what'll we wear?" Carl called.

"Skinflex."

"Oh, no!" cried Moira. "It's so clingy and hot!"

CARL laughed at her. He swept up the lizard's head and opened its jaws. "Smile at the lady. She wouldn't put any tough old skinflex in the way of your pretty teeth!"

"Put it down," said Teague sharply, though there was a flicker of amusement in his eyes. "It's still loaded, with God-knows-what alkaloid. Moira, he's right. Skinflex just doesn't puncture."

Moira looked respectfully at the yellow fangs and went obediently to storage where she pulled out the suits.

"We'll keep close together, back to back," said Teague as they helped each other into the suits. "All the weapons are were in the forward storage compartment, so we'll improvise. Tod, you and the girls each take a globe of anesthetic. It's the fastest anesthetic we have and it ought to take care of anything that breathes oxygen. I'll take scalpels. Carl—"

"The hammer," Carl grinned. His voice was fairly thrumming with excitement.

"We won't attempt to fasten the door from outside. I don't mean to go farther than ten meters out, this first time. Just—you, Carl—lift off the bar as we go out, get the door shut as quickly as possible, and prop it there. Whatever happens, do not attack anything out there unless you are attacked first, or unless I say so."

Hollow-eyed, steady, Teague moved to the door with the others close around him. Carl shifted the hammer to his left hand, lifted the bar and stood back a little, holding it like a javelin. Teague, holding a glittering lancet lightly in each hand, pushed the door open with his foot. They boiled through, stepped aside for Carl as he butted the rod deep into the soil and against the closed door. "All set."

They moved as a unit, for perhaps three meters, and stopped.

It was daytime now, but such a day as none of them had dreamed of. The light was green, very nearly a lime-green, and the shadows were purple.

The sky was more lavender than blue. The air was warm and wet.

They stood at the top of a low hill. Before them a tangle of jungle tumbled up at them. So vital, so completely alive, it seemed to move by its own power of growth. Stirring, murmuring, it was too big, too much, too wide and deep and intertwined to assimilate at a glance; the thought, *this is a jungle*, was a pitiable understatement.

To the left, savannah-like grassland rolled gently down to the choked margins of a river—calm-faced, muddy and secretive. It too seemed astir with inner growings. To the right, more jungle. Behind them, the bland and comforting wall of their compartment.

Above—

It may have been April who saw it first; in any case, Tod always associated the vision with April's scream.

They moved as she screamed, five humans jerked back the like five dolls on a single string, pressed together and to the compartment wall by an overwhelming claustrophobia. They were ants under a descending heel, flies on an anvil. Together their backs struck the wall and they cowered there, looking up.

And it was not descending. It was only—big. It was just that it was there, over them.

April said, later, that it was like a cloud. Carl would argue that it was cylindrical, with flared ends and a narrow waist. Teague never attempted to describe it, because he disliked inaccuracies, and Moira was too awed. To Tod, the object had no shape. It was a luminous opacity between him and the sky, solid, massive as mountains. There was only one thing they agreed on, and that was that it was a ship.

And out of the ship came the golden ones.

They appeared under the ship as speckles of light, and grew in size as they descended, so that the five humans must withstand a second shock: they had known the ship was huge, but had

not known until now how very high above them it hung.

Down they came, dozens, hundreds. They filled the sky over the jungle and around the five, moving to make a spherical quadrant from the horizontal to the zenith, a full hundred and eighty degrees from side to side—a radiant floating shell with its concave surface toward, around, above them. They blocked out the sky and the jungle-tops, cut off most of the strange green light, replacing it with their own—for each glowed coolly.

Each individual was distinct and separate. Later, they would argue about the form and shape of the vessel, but the exact shape of these golden things was never even mentioned. Nor did they ever agree on a name for them. To Carl they were an army, to April, angels. Moira called them (secretly) "the seraphim," and to Tod they were masters. Teague never named them.

For measureless time they hung there, with the humans gaping up at them. There was no flutter of wings, no hum of machinery to indicate how they stayed aloft, and if each individual had a device to keep him afloat, it was of a kind the humans could not recognize. They were beautiful, awesome, uncountable.

And nobody was afraid.

Tod looked from side to side, from top to bottom of this incredible formation, and became aware that it did not touch the ground. Its lower edge was exactly horizontal, at his eye level. Since the hill fell away on all sides, he could see under this lower edge, here the jungle; there down across the savannah to the river. In a new amazement he saw eyes, and protruding heads.

In the tall grass at the jungle margin was a scurry and cease, scurry and cease, as newtlike animals scrambled not quite into the open and froze, watching. Up in the lower branches of the fleshy, hook-leaved trees, the heavy scaly heads of leaf-eaters showed, and here and there was the armed head of a lizard with catlike tearing tusks.

Leather-winged fliers flapped clumsily to rest in the branches, hung for a moment for all the world like broken umbrellas, then achieved balance and folded their pinions. Something slid through the air, almost caught a branch, missed it and tumbled end-over-end to the ground, resolving itself into a broad-headed, scaly thing with wide membranes between fore and hind legs. And Tod saw his acquaintance of the night before, with its serrated tail and needle fangs.

And though there must have been eater and eaten here, hunter and hunted, they all watched silently, turned like living compass-needles to the airborne mystery surrounding the humans. They crowded-together like a nightmare parody of the Lion and the Lamb, making a constellation, a galaxy of bright and wondering eyes; their distance from each other being, in its way, cosmic.

Tod turned his face into the strange light, and saw one of the golden beings separate from the mass and drift down and forward and stop. Had this living shell been a segment of curving mirror, this one creature would have been at its focal point. For a moment there was complete stillness, a silent waiting. Then the creature made a deep gesture. Behind it, all the others did the same.

If ten thousand people stand ten thousand meters away, and if, all at once, they kneel, it is hardly possible to see just what it is they have done; yet the aspect of their mass undergoes a definite change. So it was with the radiant shell—it changed, all of it, without moving. There was no mistaking the nature of the change, though its meaning was beyond knowing. It was an obeisance. It was an expression of profound respect, first to the humans themselves, next, and hugely, to something the humans represented. It was unquestionably an act of worship.

And what, thought Tod, could we symbolize to these shining ones? He was a scarab beetle or an Egyptian cat, a Hindu cow or a Teuton tree, told sud-

denly that it was sacred.

All the while there flooded down the thing which Carl had tried so ineptly to express: "*We're sorry. But it will be all right. You will be glad. You can be glad now.*"

AT LAST there was a change in the mighty formation. The center rose and the wings came in, the left one rising and curling to tighten the curve, the right one bending inward without rising. In a moment the formation was a column, a hollow cylinder. It began to rotate slowly, divided into a series of close-set horizontal rings. Alternate rings slowed and stopped and began a counter-rotation, and with a sudden shift, became two interlocked spirals. Still the over-all formation was a hollow cylinder, but now it was composed of an upward and a downward helix.

The individuals spun and swirled down and down, up and up, and kept this motion within the cylinder, and the cylinder quite discrete, as it began to rise. Up and up it lifted, brilliantly, silently, the living original of that which they had found by Alma's body . . . up and up, filling the eye and the mind with its complex and controlled ascent, its perfect continuity; for here was a thing with no beginning and no end, all flux and balance where each rising was matched by a fall and each turn by its counterpart.

High, and higher, and at last it was a glowing spot against the hovering shadow of the ship, which swallowed it up. The ship left then, not moving, but fading away like the streamers of an aurora, but faster. In three heartbeats it was there, perhaps it was there, it was gone.

Tod closed his eyes, seeing that dynamic double helix. The tip of his mind was upon it; he trembled on the edge of revelation. He *knew* what that form symbolized. He knew it contained the simple answer to his life and their lives, to this planet and its life and the lives which were brought to it. If a cross is

more than an instrument of torture, more than the memento of an event; if the *crux ansata*, the Yin-and-Yang, David's star and all such crystallizations were but symbols of great systems of philosophy, then this dynamic intertwined spiral, this free-flowing, rigidly choreographed symbol was was—

Something grunted, something screamed, and the wondrous answer turned and rose spiraling away from him to be gone in three heartbeats. Yet in that moment he knew it was there for him when he had the time, the phasing, the bringing-together of whatever elements were needed. He could not use it yet but he had it. He had it.

Another scream, an immense thrashing all about. The spell was broken and the armistice over. There were chargings and fleerings, cries of death-agony and roaring challenges in and over the jungle, through the grasses to the suddenly boiling river. Life goes on, and death with it, but there must be more than life when too much life is thrown together.

IV

IT MAY be that their five human lives were saved, in that turbulent reawakening, only by their alienness, for the life around them was cheek-and-jowl with its familiar enemy, its familiar quarry, its familiar food, and there need be no experimenting with the five soft containers of new rich juices standing awestruck with their backs to their intrusive shelter.

Then slowly they met one another's eyes. They cared enough for each other so that there was a gladness of sharing. They cared enough for themselves so that there was also a sheepishness, a troubled self-analysis: *what did I do while I was out of my mind?*

They drew together before the door and watched the chase and slaughter around them as it subsided toward its usual balance of hunting and killing, eating and dying. Their hands began to

remember the weapons they held, their minds began to reach for reality.

"They were angels," April said, so softly that no one but Tod heard her. Tod watched her lips tremble and part, and knew that she was about to speak the thing he had almost grasped, but then Teague spoke again, and Tod could see the comprehension fade from her and be gone. "Look! Look there!" said Teague, and moved down the wall to the corner.

What had been an inner compartment of their ship was now an isolated cube, and from its back corner, out of sight until now, stretched another long wall. At regular intervals were doors, each fastened by a simple outside latch of parametal.

Teague stepped to the first door, the other crowding close. Teague listened intently, then stepped back and threw the door open.

Inside was a windowless room, blazing with light. Around the sides, machines were set. Tod instantly recognized their air-cracker, the water-purifiers, the protein-converter and one of the auxiliary power-plants. In the center was a generator coupled to a light-metal fusion motor. The output busses were neatly insulated, coupled through fuse-boxes and resistance controls to a "Christmas tree" multiple outlet. Cables ran through the wall to the Coffin compartment and to the line of unexplored rooms to their left.

"They've left us power, at any rate," said Teague. "Let's look down the line."

Fish, Tod snarled silently. Dead man! After what you've just seen you should be on your knees with the weight of it, you should put out your eyes to remember better. But all you can do is take inventory of your nuts and bolts.

Tod looked at the others, at their strained faces and their continual upward glances, as if the bright memory had magnetism for them. He could see the dream fading under Teague's untimely urgency. *You couldn't let us live with it quietly, even for a moment. Then*

another inward voice explained to him, *but you see, they killed Alma.*

Resentfully he followed Teague.

Their ship had been dismantled, strung out along the hilltop like a row of shacks. They were interconnected, wired up, re-stacked, ready and reeking with efficiency—the lab, the library, six chambers full of mixed cargo, then—then the noise Teague made was as near to a shout of glee as Tod had ever heard from the man. The door he had just opened showed their instruments inside, all the reference tapes and tools and manuals. There was even a dome in the roof, and the refractor was mounted and waiting.

"April?" Tod looked, looked again. She was gone. "April!"

She emerged from the library, three doors back. "Teague!"

Teague pulled himself away from the array of instruments and went to her. "Teague," she said, "every one of the reels has been read."

"How do you know?"

"None of them are rewound."

Teague looked up and down the row of doors. "That doesn't sound like the way they—" The unfinished sentence was enough. Whoever had built this from their ship's substance worked according to function and with a fine efficiency.

TEAGUE entered the library and picked a tape-reel from its rack. He inserted the free end of film into a slot and pressed a button. The reel spun and the film disappeared inside the cabinet.

Teague looked up and back. Every single reel was inside out on the clips. "They could have rewound them," said Teague, irritated.

"Maybe they wanted us to know that they'd read them," said Moira.

"Maybe they did," Teague murmured. He picked up a reel, looked at it, picked up another and another. "Music. A play. And here's our personal stuff—behavior film, training records, everything."

Carl said, "Whoever read through all this knows a lot about us."

Teague frowned. "Just us?"

"Who else?"

"Earth," said Teague. "All of it."

"You mean we were captured and analyzed so that whoever-they-are could get a line on Earth? You think they're going to attack Earth?"

"You mean . . . You think

Teague mimicked coldly. "I mean nothing and I think nothing! Tod, would you be good enough to explain to this impulsive young man what you learned from me earlier? That we need concern ourselves only with evidence?"

Tod shuffled his feet, wishing not to be made an example for anyone, especially Carl, to follow. Carl flushed and tried to smile. Moira took his hand secretly and squeezed it. Tod heard a slight exhalation beside him and looked quickly at April. She was angry. There were times when he wished she would not be angry.

She pointed. "Would you call *that* evidence, Teague?"

They followed her gesture. One of the tape-readers stood open. On its reel-shelf stood the counterpart of the strange object they had seen twice before—once, in miniature, found in Alma's Coffin; once again, huge in the sky. This was another of the miniatures.

Teague stared at it, then put out his hand. As his fingers touched it, the pilot-jewel on the tape-reader flashed on, and a soft, clear voice filled the room.

Tod's eyes stung. He had thought he would never hear that voice again. As he listened, he held to the lifeline of April's presence, and felt his lifeline tremble.

Alma's voice said:

"They made some adjustments yesterday with the needle-clusters in my Coffin, so I think they will put me back into it . . . Teague, oh, Teague, I'm going to die!"

"They brought me the recorder just now. I don't know whether it's for their records or for you. If it's for you, then

I must tell you . . . how can I tell you?

"I've watched them all this time how long? Months . . . I don't know. I conceived when I awoke, and the babies are coming very soon now; it's been long enough for that; and yet—how can I tell you?"

"They boarded us, I don't know how. I don't know why, nor where outside, space is strange, wrong. It's all misty, without stars; crawling with blurs and patches of light."

"They understand me; I'm sure of that—what I say, what I think. I can't understand them at all. They radiate feelings—sorrow, curiosity, confidence, respect. When I began to realize I would die, they gave me a kind of regret. When I broke and cried and said I wanted to be with you, Teague, they reassured me; they said I would. I'm sure that's what they said. But how could that be?"

"They are completely dedicated in what they are doing. Their work is a religion to them, and we are part of it. They . . . value us, Teague. They didn't just find us. They chose us. It's as if we were the best part of something even they consider great."

"The best . . .! Among them I feel like an ameba. They're beautiful, Teague. Important. Very sure of what they are doing. It's that certainty that makes me believe what I have to believe; I am going to die, and you will live, and you and I will be together. How can that be? How can that be?"

"Yet it is true, so believe it with me, Teague. But—find out how!"

"Teague, every day they have put a machine on me, radiating. It has to do with the babies. It isn't done to harm them, I'm sure of that. I'm their mother and I'm sure of it. They won't die."

"I will. I can feel their sorrow."

"And I will be with you, and they are joyous about that."

"Teague—find out how!"

Tod closed his eyes so that he would not look at Teague, and wished with all his heart that Teague had been alone to hear that ghostly voice. As to what it

had said, the words stood as a frame for a picture he could not see, showing him only where it was, not what it meant. Alma's voice had been tremulous and unsure, but he knew it well enough to know that joy and certitude had lived with her as she spoke. There was wonderment, but no fear.

Knowing that it might be her only message to them, should she not have told them more—facts, figures, measurements?

Then an old, old tale flashed into his mind, an early thing from the ancient Amerenglish, by Hynlen (Henlyne, was it? no matter) about a man who tried to convey to humanity a description of the super-beings who had captured him, with only his body as a tablet and his nails as a stylus. Perhaps he was mad by the time he finished, but his message was clear at least to him: "*Creation took eight days.*" How would he, Tod, describe an association with the ones he had seen in the sky outside, if he had been with them for nearly three hundred days?

April tugged gently at his arm. He turned toward her, still avoiding the sight of Teague. April inclined her shining white head to the door. Moira and Carl already stood outside. They joined them, and waited wordlessly until Teague came out.

When he did, he was grateful, and he need not say so. He came out, a great calm in his face and voice, passed them and let them follow him to his methodical examination of the other compartments, to finish his inventory.

Food stores, cable and conduit, metal and parametal rod and sheet stock, tools and tool-making matrices and dies. A hangar, in which lay their lifeboat, fully equipped.

But there was no long-range communication device, and no parts for one.

And there was no heavy space-drive mechanism, nor tools to make one, nor fuel if they should make the tools.

Back in the instrument room, Carl grunted. "Somebody means for us to

stick around."

"The boat—"

Teague said, "I don't think they'd have left us the boat if Earth was in range."

"We'll build a beacon," Tod said suddenly. "We'll get a rescue ship out to us."

"Out where?" asked Teague drily.

They followed his gaze. Bland and silent, merciless, the decay chronometer stared back at them. Built around a standard radioactive, it had two dials—one which measured the amount of energy radiated by the material, and one which measured the lost mass. When they checked, the reading was correct. They checked, and the reading was 64.

"Sixty-four years," said Teague. "Assuming we averaged as much as one-half light speed, which isn't likely, we must be thirty light-years away from Earth. Thirty years to get a light-beam there, sixty or more to get a ship back, plus time to make the beacon and time for Earth to understand the signal and prepare a ship." He shook his head.

"Plus the fact," Tod said in a strained voice, "that there is no habitable planet in a thirty-year radius from Sol. Except Prime."

Shocked, they gaped silently at this well-known fact. A thousand years of scrupulous search with the best instruments could not have missed a planet like this at such a distance.

"Then the chronometer's wrong!"

"I'm afraid not," said Teague. "It's sixty-four years since we left Earth, and that's that."

"And this planet doesn't exist," said Carl with a sour smile, "and I suppose that is also that."

"Yes, Teague," said Tod. "One of those two facts can't exist with the other."

"They can because they do," said Teague. "There's a missing factor. Can a man breathe under water, Tod?"

"If he has a diving-helmet."

Teague spread his hands. "It took sixty-four years to get to this planet *if*.

We have to find the figurative diving-helmet." He paused. "The evidence in favor of the planet's existence is fairly impressive," he said wryly. "Let's check the other fact."

"How?"

"The observatory."

They ran to it. The sky glowed its shimmering green, but through it the stars had begun to twinkle. Carl got to the telescope first, put a big hand on the swing-controls, and said, "Where first?" He tugged at the instrument. "Hey!" He tugged again.

"Don't!" said Teague sharply. Carl let go and backed away. Teague switched on the lights and examined the instrument. "It's already connected to the compensators," he said. "Hmp! Our hosts are most helpful." He looked at the setting of the small motors which moved the instrument to cancel diurnal rotation effects. "28 hours, 13 minutes plus. Well, if that's correct for this planet, it's proof that this isn't Earth or Prime—if we needed proof." He touched the controls lightly. "Carl, what's the matter here?"

Carl bent to look. There were dabs of dull silver on the threads of the adjusting screws. He touched them. "Parametal," he said. "Unflashed, but it has adhered enough to jam the threads. Take a couple days to get it off without jarring it. Look here—they've done the same thing with the objective screws!"

"We look at what they want us to see, and like it," said Tod.

"Maybe it's something we want to see," said April gently.

Only half-teasing, Tod said, "Whose side are you on, anyway?"

Teague put his eye to the instrument. His hands, by habit, strayed to the focusing adjustment, but found it locked the same way as the others. "Is there a Galactic Atlas?"

"Not in the rack," said Moira a moment later.

"Here," said April from the chart table. Awed, she added, "Open."

Tensely they waited while Teague

took his observation and referred to the atlas and to the catalog they found lying under it. When at last he lifted his face from the calculations, it bore the strangest expression Tod had ever seen there.

"Our diving-helmet," he said at last, very slowly, too evenly, "—that is, the factor which rationalizes our two mutually exclusive facts—is simply that our captors have a faster-than-light drive."

"But according to theory—"

"According to our telescope," Teague interrupted, "through which I have just seen Sol, and these references so thoughtfully laid out for us . . ." Shockingly, his voice broke. He took two deep breaths, and said, "Sol is 217 light-years away. That sun which set a few minutes ago is Beta Librae." He studied their shocked faces, one by one. "I don't know what we shall eventually call this place," he said with difficulty, "but we had better get used to calling it home."

THEY CALLED the planet Viridis ("the greenest name I can think of," Moira said) because none among them had ever seen such a green. It was more than the green of growing, for the sunlight was green-tinged and at night the whole sky glowed green, a green as bright as the brightest silver of Earth's moon, as water molecules, cracked by the star's intense ultraviolet, celebrated their nocturnal reunion.

They called the moons Wynken, Blynken and Nod, and the sun they called—the sun.

They worked like slaves, and then like scientists, which is a change of occupation but not a change of pace. They built a palisade of a cypress-like, straight-grained wood, each piece needle-pointed, double-laced with parametal wire. It had a barred gate and peepholes with periscopes and permanent swivel-mounts for the needle-guns they were able to fabricate from tube-stock and spare solenoids. They roofed the enclosure with parametal mesh which, at one point, could be rolled back to launch

the lifeboat.

They buried Alma.

They tested and analyzed, classified, processed, researched everything in the compound and within easy reach of it—soil, vegetation, fauna. They developed an insect-repellent solution to coat the palisade and an insecticide with an automatic spray to keep the compound clear of the creatures, for they were numerous, large, and occasionally downright dangerous, like the "flying caterpillar" which kept its pseudopods in its winged form and enthusiastically broke them off in the flesh of whatever attacked them, leaving an angry rash and suppurating sores. They discovered three kinds of edible seed and another which yielded a fine hydrocarbonic oil much like soy, and a flower whose calyces, when dried and then soaked and broiled, tasted precisely like crab-meat.

For a time they were two separate teams, virtually isolated from each other. Moira and Teague collected minerals and put them through the mass spectroscope and the radioanalyzers, and it fell to April to classify the life-forms, with Carl and Tod competing mightily to bring in new ones. Or at least photographs of new ones. Two-ton *Parame-trodon*, familiarly known as Dopey—a massive herbivore with just enough intelligence to move its jaws—was hardly the kind of thing to be carried home under one's arm, and *Felodon*, the scaly carnivore with the catlike tusks, though barely as long as a man, was about as friendly as a half-starved wolverine.

Tetrapodys (Tod called it 'Umbrella-bird') turned out to be a rewarding catch. They stumbled across a vine which bore foul-smelling pods; these the clumsy amphibious bats found irresistible.

Carl synthesized the evil stuff and improved upon it, and they smeared it on tree-boles by the river. *Tetrapodys* came there by the hundreds and laid eggs apparently in sheer frustration. These eggs were camouflaged by a frilly green membrane, for all the world like the

ground-buds of the giant water-fern. The green shoots tasted like shallots and were fine for salad when raw and excellent as onion soup when stewed. The half-hatched *Tetrapodys* yielded ligaments which when dried made excellent self-baited fish-hooks. The wing-muscles of the adult tasted like veal cutlet with fish-sauce, and the inner, or main shell of the eggs afforded them an amazing shoe-sole—light, tough, and flexible which, for some unknown reason, *Felodon* would not track.

Pteronauchis, or "flapping frog," was the gliding newt they had seen on that first day. Largely nocturnal, it was phototropic; a man with a strong light could fill a bushel with the things in minutes. Each specimen yielded twice as many, twice as large, and twice as good frog-legs as a Terran frog.

There were no mammals.

There were flowers in profusion—white (a sticky green in that light) purple, brown, blue, and, of course, the ubiquitous green. No red—as a matter of fact, there was virtually no red anywhere on the planet. April's eyes became a feast for them all. It is impossible to describe the yearning one can feel for an absent color. And so it was that a legend began with them. Twice Tod had seen a bright red growth. The first time he thought it was a mushroom, the second it seemed more of a lichen. The first time it was surrounded by a sea of crusher ants on the move—a fearsome carpet which even *Parame-trodon* respected. The second time he had seen it from twenty meters away and had just turned toward it when not one, but three *Felodons* came hurtling through the undergrowth at him.

He came back later, both times, and found nothing. And once Carl swore he saw a brilliant red plant move slowly into a rock crevice as he approached. The thing became their *edelweiss*—very nearly their Grail.

ROUGH diamonds lay in the stream-beds and emeralds glinted in the

night-glow, and for the Terran-oriented mind there was incalculable treasure to be scratched up just below the steaming humus: iridium, ruthenium, metallic neptunium 237. There was an unaccountable (at first) shift toward the heavier metals. The ruthenium-rhodium-palladium group was as plentiful on Viridis as the iron-nickel-cobalt series on Earth; cadmium was actually more plentiful here than its relative, zinc. Technetium was present, though rare, on the crust, while Earth's has long since decayed.

Vulcanism was common on Viridis, as could be expected in the presence of so many radioactives. From the lifeboat they had seen bald-spots where there were particularly high concentrations of "hot" material. In some of these there was life.

At the price of a bout of radiation sickness, Carl went into one such area briefly for specimens. What he found was extraordinary—a tree which was warm to the touch, which used minerals and water at a profligate pace, and which, when transplanted outside an environment which destroyed cells almost as fast as they developed, went cancerous, grew enormously, and killed itself with its own terrible viability. In the same lethal areas lived a primitive worm which constantly discarded segments to keep pace with its rapid growth, and which also grew visibly and died of living too fast when taken outside.

The inclination of the planet's axis was less than 2° , so that there were virtually no seasons, and very little variation in temperature from one latitude to another. There were two continents and an equatorial sea, no mountains, no plains, and few large lakes. Most of the planet was gently rolling hill-country and meandering rivers, clothed in thick jungle or grass. The spot where they had awakened was as good as any other, so there they stayed, wandering less and less as they amassed information. Nowhere was there an ar-

tifact of any kind, nor any slightest trace of previous habitation. Unless, of course, one considered the existence itself of life on this planet. For Permian life can hardly be expected to develop in less than a billion years; yet the irreproachable calendar inherent in the radioactive bones of Viridis insisted that the planet was no more than thirty-five million years old.

V

WHEN Moira's time came, it went hard with her, and Carl forgot to swagger because he could not help. Teague and April took care of her, and Tod stayed with Carl, wishing for the right thing to say and not finding it, wanting to do something for this new strange man with Carl's face, and the unsure hands which twisted each other, clawed the ground, wiped cruelly at the scalp, at the shins, restless, terrified. Through Carl, Tod learned a little more of what he never wanted to know—what it must have been like for Teague when he lost Alma.

Alma's six children were toddlers by then, bright and happy in the only world they had ever known. They had been named for moons—Wynken, Blynken and Nod, Luna, Callisto and Titan. Nod and Titan were the boys, and they and Luna had Alma's eyes and hair and sometimes Alma's odd, brave stillness—a sort of suspension of the body while the mind went out to grapple and conquer instead of fearing. If the turgid air and the radiant ground affected them, they did not show it, except perhaps in their rapid development.

They heard Moira cry out. It was like laughter, but it was pain. Carl sprang to his feet. Tod took his arm and Carl pulled it away. "Why can't I do something? Do I have to just *sit* here?"

"Shh. She doesn't feel it. That's a tropism. She'll be all right. Sit down, Carl. Tell you what you can do—you can name them. Think. Think of a nice set of names, all connected in some way.

Teague used moons. What are you going to—"

"Time enough for that," Carl grunted. "Tod . . . do you know what I'll . . . I'd be if she—if something happened?"

"Nothing's going to happen."

"I'd just cancel out. I'm not Teague. I couldn't carry it. How does Teague do it? . . ." Carl's voice lapsed to a mumble.

"Names," Tod reminded him. "Seven, eight of 'em. Come on, now."

"Think she'll have eight?"

"Why not? She's normal." He nudged Carl. "Think of names. I know! How many of the old signs of the zodiac would make good names?"

"Don't remember 'em."

"I do. Aries, that's good. Taurus. Gem—no; you wouldn't want to call a child 'Twins' Leo—that's *fine*!"

"Libra," said Carl, "For a girl. Aquarius, Saggittarius—how many's that?"

Tod counted on his fingers. "Six. Then, Virgo and Capricorn. And you're all set!" But Carl wasn't listening. In two long bounds he reached April, who was just stepping into the compound. She looked tired. She looked more than tired. In her beautiful eyes was a great pity, the color of a bleeding heart.

"Is she all right? Is she?" They were hardly words, those hoarse, rushed things.

April smiled with her lips, while her eyes poured pity. "Yes, yes, she'll be all right. It wasn't too bad."

Carl whooped and pushed past her. She caught his arm, and for all her frailty, swung him around.

"Not yet, Carl. Teague says to tell you first—"

"The babies? What about them? How many, April?"

April looked over Carl's shoulder at Tod. She said, "Three."

Carl's face relaxed, numb, and his eyes went round. "Th—what? Three so far, you mean. There'll surely be more. . ."

She shook her head.

TOD FELT the laughter explode within him, and he clamped his jaws on it. It surged at him, hammered in the back of his throat. And then he caught April's pleading eyes. He took strength from her, and bottled up a great bray of merriment.

Carl's voice was the last fraying thread of hope. "The others died, then."

She put a hand on his cheek. "There were only three. Carl . . . don't be mean to Moira."

"Oh, I won't," he said with difficulty. "She couldn't . . . I mean it wasn't her doing." He flashed a quick, defensive look at Tod, who was glad now he had controlled himself. What was in Carl's face meant murder for anyone who dared laugh. April said, "Not your doing either, Carl. It's this planet. It must be."

"Thanks, April," Carl muttered. He went to the door, stopped, shook himself like a big dog. He said again, "Thanks," but this time his voice didn't work and it was only a whisper. He went inside.

Tod bolted for the corner of the building, whipped around it and sank to the ground, choking. He held both hands over his mouth and laughed until he hurt. When at last he came to a limp silence, he felt April's presence. She stood quietly watching him, waiting.

"I'm sorry," he said. "I'm sorry. But it is funny."

She shook her head gravely. "We're not on Earth, Tod. A new world means new manners, too. That would apply even on Terra Prime if we'd gone there."

"I suppose," he said, and then repressed another giggle.

"I always thought it was a silly kind of joke anyway," she said primly. "Judging virility by the size of a brood. There isn't any scientific basis for it. Men are silly. They used to think that virility could be measured by the amount of hair on their chests, or how tall they were. There's nothing wrong with having only three."

"Carl?" grinned Tod. "The big ol' swashbuckler?" He let the grin fade.

"All right, Ape. I won't let Carl see me laugh. Or you either. All right?"
 "A peculiar expression crossed his face.
 "What was that you said? April! Men never had hair on their chests!"

"Yes they did. Ask Teague."

"I'll take your word for it." He shuddered. "I can't imagine it unless a man had a tail too. And bony ridges over his eyes."

"It wasn't so long ago that they had. The ridges, anyway. Well—I'm glad you didn't laugh in front of him. You're nice, Tod."

"You're nice too." He pulled her down beside him and hugged her gently. "Bet you'll have a dozen."

"I'll try." She kissed him.

WHEN specimen-hunting had gone as far as it could, classification became the settlement's main enterprise. And gradually, the unique pattern of Viridian life began to emerge.

Viridis had its primitive fish and several of the mollusca, but the fauna was primarily insects, arthropods, and reptiles. The interesting thing about each of the three branches was the close relationship between species. It was almost as if evolution took a major step with each generation, instead of stumbling along as on Earth, where certain stages of development are static for thousands, millions of years. *Pterodon*, for example, existed in three varieties, the simplest of which showed a clear similarity to *pteronauchis*, the gliding newt. A simple salamander could be shown to be the common ancestor of both the flapping frog and massive *Parametrodon*, and there were strong similarities between this salamander and the worm which fathered the arthropods.

They lived close to the truth for a long time without being able to see it, for man is conditioned to think of evolution from simple to complex, from ooze to animalcule to mollusc to ganoid; amphibid to monotreme to primate to tinker . . . losing the significance of the fact

that all these co-exist. Was the vertebrate eel of prehistory a *higher* form of life than his simpler descendant? The whale lost his legs; this men call recidivism, a sort of backsliding in evolution, and treat it as a kind of illegitimacy.

Men are oriented out of simplicity toward the complex, and make of the latter a goal. Nature treats complex matters as expediencies and so is never confused. It is hardly surprising, then, that the Viridis colony took so long to discover their error, for the weight of evidence was in error's favor. There was indeed an unbroken line from the lowest forms of life to the highest, and to assume that they had a common ancestor was a beautifully consistent hypothesis, of the order of accuracy an archer might display in hitting dead center, from a thousand paces, a bowstring with the nock of his arrow.

The work fell more and more on the younger ones. Teague isolated himself, not by edict, but by habit. It was assumed that he was working along his own lines; and then it became usual to proceed without him, until finally he was virtually a hermit in their midst. He was aging rapidly; perhaps it hurt something in him to be surrounded by so much youth. His six children thrived, and with Carl's three, ran naked in the jungle armed only with their sticks and their speed. They were, apparently, practically immune to everything Viridis might bring against them, even *Crotalidus*' fangs, which gave them the equivalent of a severe bee-sting (as opposed to what had happened to Moira once, when they had had to reactivate one of the Coffins to keep her alive).

Tod would come and sit with him sometimes, and as long as there was no talk, the older man seemed to gain something from the visits. But he preferred to be alone, living as much as he could with memories, for which not even a new world could afford a substitute.

Tod said to Carl, "Teague is going to wither up and blow away if we can't

interest him in something."

"He's interested enough to spend a lot of time with whatever he's thinking about," Carl said bluntly.

"But I'd like it better if he was interested in something here, now. I wish we could . . . I wish—" But he could think of nothing, and it was a constant trouble to him.

LITTLE Titan was killed, crushed under a great clumsy *Parametrodon* which slid down a bank on him while the child was grubbing for the scarlet cap of the strange red mushroom they had glimpsed from time to time. It was in pursuit of one of these that Moira had been bitten by the *Crotalidus*. One of Carl's children was drowned—just how, no one knew. Aside from these tragedies, life was easy and interesting. The compound began to look more like a *kraal* as they acclimated, for although the adults never adapted as well as the children, they did become far less sensitive to insect bites and the poison weeds which first troubled them.

It was Teague's son Nod who found what was needed to bring Teague's interest back, at least for a while. The child came back to the compound one day, trailed by two slinking *Felodons* who did not catch him because they kept pausing and pausing to lap up goutts of blood which marked his path. Nod's ear was torn and he had a green-stick break in his left ulna, and a dislocated wrist. He came weeping, weeping tears of joy. He shouted as he wept, great proud noises. Once in the compound he collapsed, but he would not lose consciousness, nor his grip on his prize, until Teague came. Then he handed Teague the mushroom and fainted.

The mushroom was and was not like anything on Earth. Earth has a fungus called *schizophyllum*, not uncommon but most strange. Though not properly a fungus, the red "mushroom" of Viridis had many of the functions of *schizophyllum*.

Schizophyllum produces spores of

four distinct types, each of which grows into a genetically distinct, completely dissimilar plant. Three of these are sterile. The fourth produces *schizophyllum*.

The red mushroom of Viridis also produced four distinct heterokaryons, or genetically different types, and the spores of one of these produced the mushroom.

Teague spent an engrossing earth-year in investigating the other three.

VI

SWEATING and miserable in his integument of flexskin, Tod hunched in the crotch of a finger-tree. His knees were drawn up and his head was down; his arms clasped his shins and he rocked slightly back and forth. He knew he would be safe here for some time—the fleshy fingers of the tree were clumped at the slender, swaying ends of the branches and never turned back toward the trunk. He wondered what it would be like to be dead. Perhaps he would be dead soon, and then he'd know. He might as well be.

The names he'd chosen were perfect, and all of a family: Sol, Mercury, Venus, Terra, Mars, Jupiter . . . eleven of them. And he could think of a twelfth if he had to.

For what?

He let himself sink down again into the blackness wherein nothing lived but the oily turning of *what's it like to be dead?*

Quiet, he thought. *No one would laugh.*

Something pale moved on the jungle floor below him. He thought instantly of April, and angrily put the thought out of his mind. April would be sleeping now, having completed the trifling task it had taken her so long to start. Down there, that would be Blynken, or maybe Luna. They were very alike.

It didn't matter, anyway.

He closed his eyes and stopped rocking. He couldn't see anyone, no one

could see him. That was the best way. So he sat, and let time pass, and when a hand lay on his shoulder, he nearly leaped out of the tree. "Damn it, Blynken—"

"It's me. Luna." The child, like all of Alma's daughters, was large for her age and glowing with health. How long had it been? Six, eight . . . nine Earth years since they had landed.

"Go hunt mushrooms," Tod growled. "Leave me alone."

"Come back," said the girl.

Tod would not answer. Luna knelt beside him, her arm around the primary

"Luna, I'm sorry, I'm sorry . . . I wasn't I'm not—*Luna!* Don't be dead!"

She stirred and made a tearing sound with her throat. Her eyelids trembled and opened, uncovering pain-blinded eyes. "Luna!"

"It's all right," she whispered, "I shouldn't've bothered you. Do you want me to go away?"

"No," he said, "No." He held her tight. *Why not let her go away?* a part of him wondered, and another part, frightened and puzzled, cried, *No! No!* He had an urgent, half-hysterical need

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branch, her back, with his, against the trunk. She bent her head and put her cheek against his. "Tod."

Something inside him flamed. He bared his teeth and swung a heavy fist. The girl doubled up soundlessly and slipped out of the tree. He stared down at the lax body and at first could not see it for the haze of fury which blew and whirled around him. Then his vision cleared and he moaned, tossed his club down and dropped after it. He caught up the club and whacked off the tree-fingers which probed toward them. He swept up the child and leapt clear, and sank to his knees, gathering her close.

to explain. *Why explain to her, a child? Say you're sorry, comfort her, heal her, but don't expect her to understand.* Yet he said, "I can't go back. There's nowhere else to go. So what can I do?"

LUNA was quiet, as if waiting. A terrible thing, a wonderful thing, to have someone you have hurt wait patiently like that while you find a way to explain. Even if you only explain it to yourself . . . "What could I do if I went back? They—they'll never—they'll laugh at me. They'll all laugh. They're laughing now." Angry again, plaintive no more, he blurted, "April! *Damn*

April! She's made a eunuch out of me!"

"Because she had only one baby?"

"Like a savage."

"It's a beautiful baby. A boy."

"A man, a real man, fathers six or eight."

She met his eyes gravely. "That's silly."

"What's happening to us on this crazy planet?" he raged. "Are we evolving backward? What comes next—one of you kids hatching out some amphibids?"

She said only, "Come back, Tod."

"I can't," he whispered. "They'll think I'm . . . that I can't. . ." Helplessly, he shrugged. "They'll laugh."

"Not until you do, and then they'll laugh *with* you. Not at you, Tod."

Finally, he said it, "April won't love me; she'll never love a weakling."

She pondered, holding him with her clear gaze. "You really need to be loved a whole lot."

Perversely, he became angry again. "I can get along!" he snapped.

And she smiled and touched the nape of his neck. "You're loved," she assured him. "Gee, you don't have to be mad about that. I love you, don't I? April loves you. Maybe I love you even more than she does. She loves everything you are, Tod. I love everything you ever were and everything you ever will be."

He closed his eyes and a great music came to him. A long, long time ago he had attacked someone who came to comfort him, and she had let him cry, and at length she had said . . . not exactly these words, but—it was the same.

"Luna."

He looked at her. "You said all that to me before."

A puzzled small crinkle appeared between her eyes and she put her fingers on it. "Did I?"

"Yes," said Tod, "but it was before you were even born."

He rose and took her hand, and they went back to the compound, and whether he was laughed at or not he never knew, for he could think of nothing but

his full heart and of April. He went straight in to her and kissed her gently and admired his son, whose name was Sol, and who had been born with hair and two tiny incisors, and who had heavy bony ridges over his eyes. . . .

A FANTASTIC storage capacity," Teague remarked, touching the top of the scarlet mushroom. "The spores are almost microscopic. The thing doesn't seem to want them distributed, either. It positively hoards them, millions of them."

"Start over, please," April said. She shifted the baby in her arms. He was growing prodigiously. "Slowly. I used to know something about biology—or so I thought. But *this*—"

Teague almost smiled. It was good to see. The aging face had not had so much expression in it in five Earth-years. "I'll get as basic as I can, then, and start from there. First of all, we call this thing a mushroom; but it isn't. I don't think it's a plant, though you couldn't call it an animal, either."

"I don't think anybody ever told me the real difference between a plant and an animal," said Tod.

"Oh . . . well, the most convenient way to put it—it's not strictly accurate, but it will do—is that plants make their own food and animals subsist on what others have made. This thing does both. It has roots, but—" he lifted an edge of the skirted stem of the mushroom—"it can move them. Not much, not fast; but if it wants to shift itself, it can."

April smiled, "Tod, I'll give you basic biology any time. Do go on, Teague."

"Good. Now, I explained about the heterokaryons—the ability this thing has to produce spores which grow up into four completely different plants. One is a mushroom just like this. Here are the other three."

Tod looked at the box of plants. "Are they really all from the mushroom spores?"

"Don't blame you," said Teague, and

actually chuckled. "I didn't believe it myself at first. A sort of pitcher-plant, half full of liquid. A thing like a cactus. And this one. It's practically all underground, like a truffle, although it has these cilia. You wouldn't think it was anything but a few horsehairs stuck in the ground."

"And they're all sterile," Tod recalled.

"They're not," said Teague, "and that's what I called you in here to tell you. They'll yield if they are fertilized."

"Fertilized how?"

Instead of answering, Teague asked April, "Do you remember how far back we traced the evolution of Viridian life?"

"Of course. We got the arthropods all the way back to a simple segmented worm. The insects seemed to come from another worm, with pseudopods and a hard carapace."

"A caterpillar," Tod interpolated.

"Almost," said April, with a scientist's nicety. "And the most primitive reptile we could find was a little gymnoderm you could barely see without a glass."

"Where did we find it?"

"Swimming around in—oh! In those pitcher-plant things!"

"If you won't take my word for this," said Teague, a huge enjoyment glinting between his words, "you'll just have to breed these things yourself. It's a lot of work, but this is what you'll discover."

"An adult gymnoderm—a male—finds this pitcher and falls in. There's plenty of nutriment for him, you know, and he's a true amphibian. He fertilizes the pitcher. Nodules grow under the surface of the liquid inside there—" he pointed "—and bud off. The buds are mobile. They grow into wrigglers, miniature tadpoles. Then into lizards. They climb out and go about the business of being—well, lizards."

"All males?" asked Tod.

"No," said Teague, "and that's an angle I haven't yet investigated. But apparently some males breed with fe-

males, which lay eggs, which hatch into lizards, and some find plants to fertilize. Anyway, it looks as if this plant is actually the progenitor of all the reptiles here; you know how clear the evolutionary lines are to all the species."

"What about the truffle with the horsehairs?" asked Tod.

"A pupa," said Teague, and to the incredulous expression on April's face, he insisted, "Really—a pupa. After nine weeks or so of dormance, it hatches out into what you almost called a caterpillar."

"And then into all the insects here," said April, and shook her head in wonderment. "And I suppose that cactus-thing hatches out the nematodes, the segmented ones that evolve into arthropods?"

Teague nodded. "You're welcome to experiment," he said again, "but believe me—you'll only find out I'm right: it really happens."

"Then this scarlet mushroom is the beginning of everything here."

"I can't find another theory," said Teague.

"I can," said Tod.

They looked at him questioningly, and he rose and laughed. "Not yet. I have to think it through." He scooped up the baby and then helped April to her feet. "How do you like our Sol, Teague?"

"Fine," said Teague. "A fine boy." Tod knew he was seeing the heavy occipital ridges, the early teeth, and saying nothing. Tod was aware of a faint inward surprise. He should have resented what might be in Teague's mind, but he did not. The beginnings of an important insight welcomed criticism of the child, recognized its hairiness, its savagery, and found these things good. But as yet the thought was too nebulous to express, except by a smile. He smiled, took April's hand, and left.

"That was a funny thing you said to Teague," April told him as they walked toward their quarters.

"Remember, April, the day we landed? Remember—" he made a gesture

that took in a quadrant of sky, "Remember how we all felt . . . good?"

"Yes," she murmured. "It was like a sort of compliment, and a reassurance. How could I forget?"

"Yes. Well . . ." He spoke with difficulty but his smile stayed. "I have a thought, and it makes me feel like that. But I can't get it into words." After a thoughtful pause, he added, "Yet."

She shifted the baby again. "He's getting so heavy."

"I'll take him." He took the squirming bundle with the deep-set, almost humorous eyes. When he looked up from them, he caught an expression on April's face which he hadn't seen in years. "What is it, Ape?"

"You—like him."

"Well, sure."

"I was afraid. I was afraid for a long time that you . . . he's ours, but he isn't exactly a pretty baby."

"I'm not exactly a pretty father."

"You know how precious you are to me?" she whispered.

He knew, for this was an old intimacy between them. He laughed and followed the ritual: "How precious?"

She cupped her hands and brought them together, to make of them an ivory box. She raised the hands and peeped into them, between the thumbs, as if at a rare jewel, then clasped the magic tight and hugged it to her breast, raising tear-filled eyes to him. "That precious," she breathed.

He looked at the sky, seeing somewhere in it the many peak moments of their happiness when she had made that gesture, feeling how each one, meticulously chosen, brought all the others back. "I used to hate this place," he said. "I guess it's changed."

"You've changed."

Changed how? he wondered. He felt the same, even though he knew he looked older.

THE years passed, and the children grew. When Sol was fifteen Earth-years old, short, heavy-shouldered, pow-

erful, he married Carl's daughter Libra. Teague, turning to parchment, had returned to his hermitage from the temporary stimulation of his researches on what they still called "the mushroom." More and more the colony lived off the land and out of the jungle, not because there was any less to be synthesized from their compact machines, but out of preference; it was easier to catch flapping frogs or umbrella-birds and cook them than to bother with machine settings and check-analyses, and, somehow, a lot more fun to eat them, two.

It seemed to them, safer, year by year. *Felodon*, unquestionably the highest form of life on Viridis, was growing scarce, being replaced by a smaller, more timid carnivore April called *Vulpidus* (once, for it seemed not to matter much any more about keeping records) and everyone ultimately called "fox," for all the fact that it was a reptile. *Pterodon* was disappearing too, as were all the larger forms. More and more they strayed after food, not famine-driven, but purely for variety; more and more they found themselves welcome and comfortable away from the compound. Once Carl and Moira drifted off for nearly a year. When they came back they had another child—a silent, laughing little thing with oddly long arms and heavy teeth.

The warm days and the glowing nights passed comfortably and the stars no longer called. Tod became a grandfather and was proud. The child, a girl, was albino like April, and had exactly April's deep red eyes. Sol and Libra named her Emerald, a green name and a ground-term rather than a sky-term, as if in open expression of the slow spell worked on them all by Viridis. She was mute—but so were almost all the new children, and it seemed not to matter. They were healthy and happy.

Tod went to tell Teague, thinking it might cheer the old one up a little. He found him lying in what had once been his laboratory, thin and placid and disinterested, absently staring down one

of the arthropodal flying creatures that had once startled them so by zooming into the Coffin chamber. This one had happened to land on Teague's hand, and Teague was laxly waiting for it to fly off again, out through the unscreened window, past the unused sprays, over the faint tumble of rotted spars which had once been a palisade.

"Teague, the baby's come!"

Teague sighed, his tired mind detaching itself from memory episode by episode. His eyes rolled toward Tod and finally he turned his head. "Which one would that be?"

Tod laughed. "My grandchild, a girl. Sol's baby."

Teague let his lids fall. He said nothing.

"Well, aren't you glad?"

Slowly a frown came to the papery brow. "Glad." Tod felt he was looking at the word as he had stared at the arthropod, wondering limply when it might go away. "What's the matter with it?"

"What?"

Teague sighed again, a weary, impatient sound. "What does it look like?" he said slowly, emphasizing each one-syllabled word.

"Like April. Just like April."

Teague half sat up, and blinked at Tod. "You don't mean it."

"Yes, eyes red as—" The image of an Earth sunset flickered near his mind but vanished as too hard to visualize. Tod pointed at the four red-capped "mushrooms" that had stood for so many years in the testboxes in the laboratory. "Red as those."

"Silver hair," said Teague.

"Yes, beau—"

"All over," said Teague flatly.

"Well, yes."

Teague let himself fall back on the cot and gave a disgusted snort. "A monkey."

"Teague!"

"Ah-h-h . . . go 'way," growled the old man. "I long ago resigned myself to what was happening to us here. A

human being just can't adapt to the kind of radioactive ruin this place has for us. Your monsters 'll breed monsters, and their monsters'll do the same if they can, until pretty soon they just won't breed any more. And that will be the end of that, and good riddance. ."

His voice faded away. His eyes opened, looking on distant things, and gradually found themselves focused on the man who stood over him in shocked silence. "But the one thing I can't stand is to have somebody come in here saying, 'Oh, joy, oh happy day!'"

"Teague . ." Tod swallowed heavily.

"Viridis eats ambition; there was going to be a city here," said the old man indistinctly. "Viridis eats humanity; there were going to be people here." He chuckled gruesomely. "All right, all right, accept it if you have to—and you have to. But don't come around here celebrating."

Tod backed to the door, his eyes horror-round, then turned and fled.

VII

APRIL held him as he crouched against the wall, rocked him slightly, made soft unspellable mother-noises to him.

"Shh, he's all decayed, all lonesome and mad," she murmured. "Shh. Shh."

Tod felt half-strangled. As a youth he had been easily moved, he recalled; he had that tightness of the throat for sympathy, for empathy, for injustices he felt the Universe was hurling at him out of its capacious store. But recently life had been placid, full of love and togetherness and a widening sense of membership with the earth and the air and all the familiar things which walked and flew and grew and bred in it. And his throat was shaped for laughter now; these feelings hurt him.

"But he's right," he whispered. "Don't you see? Right from the beginning it . . . it was . . . remember Alma had six children, April? And a little later, Carl and Moira had three? And

you, only one how long is it since the average human gave birth to only one?"

"They used to say it was humanity's last major mutation," she admitted. "Multiple births . . . these last two thousand years. But—"

"Eyebrow ridges," he interrupted. "Hair . . . that skull, Emerald's skull, slanting back like that; did you see the tusks on that little *baboon* of Moira's?"

"Tod! *Don't!*"

He leaped to his feet, sprang across the room and snatched the golden helix from the shelf where it had gleamed its locked symbolism down on them ever since the landing. "Around and down!" he shouted, "Around and around and down!" He squatted beside her and pointed furiously. "Down and down into the blackest black there is; down into *nothing*." He shook his fist at the sky. "You see what they do? They find the highest form of life they can and plant it here and watch it slide down into the muck!" He hurled the artifact away from him.

"But it goes up too, round and up. Oh, Tod!" she cried. "Can you remember them, what they looked like, the way they flew, and say these things about them?"

"I can remember Alma," he gritted, "conceiving and gestating alone in space, while they turned their rays on her every day. You know *why*?" With the sudden thought, he stabbed a finger down at her. "To give her babies a head-start on Viridis, otherwise they'd have been born normal here; it would've taken another couple of generations to start them downhill, and they wanted us all to go together."

"No, Tod, no!"

"Yes, April, yes. How much proof do you need?" He whirled on her. "Listen—remember that mushroom Teague analyzed? He had to *pry* spores out of it to see what it yielded. Remember the three different plants he got? Well, I was just there; I don't know how many times before I've seen it, but only now

it makes sense. He's got four mushrooms now; do you see? Do you see? Even back as far as we can trace the bugs and newts on this green hell-pit, Viridis won't let anything climb; it must fall."

"I don't—"

"You'll give me basic biology any time," he quoted sarcastically. "Let me tell you some biology. That mushroom yields three plants, and the plants yield animal life. Well, when the animal life fertilized those hetero- whatever—"

"Heterokaryons."

"Yes. Well, you don't get animals that can evolve and improve. You get one pitiful generation of animals which breeds back into a mushroom, and there it sits hoarding its spores. Viridis wouldn't let one puny newt, one primitive pupa build! It snatches 'em back, locks 'em up. That mushroom isn't the beginning of everything here—*it's the end!*"

April got to her feet slowly, looking at Tod as if she had never seen him before, not in fear, but with a troubled curiosity. She crossed the room and picked up the artifact, stroked its gleaming golden coils. "You could be right," she said in a low voice. "But that can't be all there is to it." She set the helix back in its place. "They *wouldn't*."

SHE said it with such intensity that for a moment that metrical formation, mighty and golden, rose again in Tod's mind, up and up to the measureless cloud which must be a ship. He recalled the sudden shift, like a genuflection, directed at them, at *him*, and for that moment he could find no evil in it. Confused, he tossed his head, found himself looking out the door, seeing Moira's youngest ambling comfortably across the compound, knuckles and heels,

"They *wouldn't*?" he snarled. He took April's slender arm and whirled her to the door. "You know what I'd do before I'd father another one like *that*?" He

told her specifically what he would do. "A lemur next, hm? A spider, an oyster, a jellyfish!"

April whimpered and ran out. "Know any lullabies to a tapeworm?" he roared after her. She disappeared into the jungle, and he fell back, gasping for breath.

HAVING no stomach for careful thought nor careful choosing, having Teague for an example to follow, Tod too turned hermit. He could have survived the crisis easily, perhaps, with April to help, but she did not come back. Moira and Carl were off again, wandering; the children lived their own lives, and he had no wish to see Teague. Once or twice Sol and Libra came to see him, but he snarled at them and they left him alone. It was no sacrifice. Life on Viridis was very full for the contented ones.

He sulked in his room or poked about the compound by himself. He activated the protein converter once, but found its products tasteless, and never bothered with it again. Sometimes he would stand near the edge of the hilltop and watch the children playing in the long grass, and his lip would curl.

Damn Teague! He'd been happy enough with Sol all those years, for all the boy's bulging eyebrow ridges and hairy body. He had been about to accept the silent, silver Emerald, too, when the crotchety old man had dropped his bomb. Once or twice Tod wondered detachedly what it was in him that was so easily reached, so completely insecure, that the suggestion of abnormality should strike so deep.

Somebody once said, "*You really need to be loved, don't you, Tod?*"

No one would love this tainted thing, father of savages who spawned animals. He didn't deserve to be loved.

He had never felt so alone. "*I'm going to die. But I will be with you too.*" That had been Alma. Huh! There was old Teague, tanning his brains in his own sour acids. Alma had believed

something or other . . . and what had come of it? That wizened old crab lolling his life away in the lab.

Tod spent six months that way.

TOD."

He came out of sleep reluctantly, because in sleep an inner self still lived with April where there was no doubt and no fury; no desertion, no loneliness.

He opened his eyes and stared dully at the slender figure silhouetted against Viridis' glowing sky. "April?"

"Moira," said the figure. The voice was cold.

"Moira!" he said, sitting up. "I haven't seen you for a year. More. Wh—"

"Come," she said. "Hurry."

"Come where?"

"Come by yourself or I'll get Carl and he'll carry you." She walked swiftly to the door.

He reeled after her. "You can't come in here and—"

"Come on." The voice was edged and slid out from between clenched teeth. A miserable part of him twitched in delight and told him that he was important enough to be hated. He despised himself for recognizing the twisted thought, and before he knew what he was doing he was following Moira at a steady trot.

"Where are—" he gasped, and she said over her shoulder, "If you don't talk you'll go faster."

At the jungle margin a shadow detached itself and spoke. "Got him?"

"Yes, Carl."

The shadow became Carl. He swung in behind Tod, who suddenly realized that if he did not follow the leader, the one behind would drive. He glanced back at Carl's implacable bulk, and then put down his head and jogged doggedly along as he was told.

They followed a small stream, crossed it on a fallen tree, and climbed a hill. Just as Tod was about to accept the worst these determined people might offer in exchange for a moment to ease

his fiery lungs, Moira stopped. He stumbled into her. She caught his arm and kept him on his feet.

"In there," she said, pointing.

"A finger tree."

"You know how to get inside," Carl growled.

Moira said, "She begged me not to tell you, ever. I think she was wrong." "Who? What is—"

"Inside," said Carl, and shoved him roughly down the slope.

His long conditioning was still with him, and reflexively he sidestepped the fanning fingers which swayed to meet him. He ducked under them, batted aside the inner phalanx, and found himself in the clear space underneath. He stopped there, gasping.

Something moaned.

He bent, fumbled cautiously in the blackness. He touched something smooth and alive, recoiled, touched it again. A foot.

Someone began to cry harshly, hurtfully, the sound exploding as if through clenched hands. "*April!*"

"I told them not to. . ." and she moaned.

"April, what is it, what's happened?"

"You needn't be," she said, sobbed a while, and went on, " . . . angry. It didn't live."

"What didn't you mean you April, you—"

"It wouldn't've been a tapeworm," she whispered.

"Who—" he fell to his knees, found her face. "When did you—"

"I was going to tell you that day, that very same day, and when you came in so angry at what Teague told you, I specially wanted to, I thought you'd be glad."

"April, why didn't you come back? If I'd known. . ."

"You said what you'd do if I ever . . . if you ever had another . . . you meant it, Tod."

"It's this place, this Viridis," he said sadly.

"I went crazy."

HE FELT her wet hand on his cheek. "It's all right. I just didn't want to make it worse for you."

"I'll take you back."

"No, you can't. I've been . . . I've lost a lot of . . . just stay with me a little while"

"Moira should have—"

"She just found me," and April. "I've been alone all the— I guess I made a noise. I didn't mean to. Tod . . . don't quarrel. Don't go into a lot of . . . it's all right."

Against her throat, he cried, "*All right!*"

"When you're by yourself," she said faintly, "you think; you think better. Did you ever think of—"

"April!" he cried in anguish, the very sound of her pale, pain-wracked voice making this whole horror real.

"Shh, sh. Listen," she said rapidly, "There isn't time, you know, Tod. Tod, did you ever think of us all, Teague and Alma and Moira and Carl and us, what we are?"

"I know what I am."

"Shh. Altogether we're a leader and a mother; a word and a shield; a doubter, a mystic. . ." Her voice trailed off. She coughed and he could feel the spastic jolt shoot through her body. She panted lightly for a moment and went on urgently, "Anger and prejudice and stupidity, courage, laughter, love, music

it was all aboard that ship and it's all here on Viridis. Our children, and theirs—no matter what they look like, Tod, no matter how they live or what they eat—they have that in them. Humanity isn't just a way of walking, merely a kind of skin. It's what we had together and what we gave Sol. It's what the golden ones found in us and wanted for Viridis. You'll see. You'll see."

"Why Viridis?"

"Because of what Teague said—what you said." Her breath puffed out in the ghost of a laugh. "Basic biology ontogeny follows phylogeny. The human foetus is a cell, an animalcule, a

gilled amphibian . . . all up the line. It's there in us; Viridis makes it go backward."

"To what?"

"The mushroom. The spores. We'll be spores, Tod. Together. Alma said she could be dead, and together with Teague! That's why I said . . . it's all right. This doesn't matter, what's happened. We live in Sol, we live in Emerald with Carl and Moira, you see? Closer, nearer than we've ever been."

Tod took a hard hold on his reason. "But back to spores—why? What then?"

She sighed. It was unquestionably a happy sound. "They'll be back for the reaping, and they'll have us, Tod, all we are and all they worship: goodness and generosity and the urge to build; mercy; kindness."

"Stupidity, pride. Fear."

"They're needed too," she whispered. "And the spores make mushrooms, and the mushrooms make the heterokaryons; and from those, away from Viridis, come the life-forms to breed us—us, Tod!—into whichever form is dominant. And there we'll be, that flash of old understanding of a new idea . . . the special pressure on a painter's hand that makes him a Rembrandt, the sense of architecture that turns a piano-player into a Bach. Three billion extra years of evolution, ready to help wherever it can be used. On every Earth-type planet, Tod—millions of us, blowing about in the summer wind, waiting to give. . ."

"Give! Give what Teague is now, rotten and angry?"

"That isn't Teague. That will die off. Teague lives with Alma in their children, and in theirs she said she'd be with him!"

"Me . . . what about me?" he breathed. "What I did to you. . ."

"Nothing, you did nothing. You live in Sol, in Emerald. Living, conscious, alive . . . with me. . ."

He said, "You mean . . . you could talk to me from Sol?"

"I think I might." With his forehead,

bent so close to her, he felt her smile. "But I don't think I would. Lying so close to you, why should I speak to an outsider?"

Her breathing changed and he was suddenly terrified. "April, don't die."

"I won't," she said. "Alma didn't." She kissed him gently and died.

IT WAS a long darkness, with Tod hardly aware of roaming and raging through the jungle, of eating without tasting, of hungering without knowing of it. Then there was a twilight, many months long, soft and still, with restfulness here and a promise soon. Then there was the compound again, found like a dead memory, learned again just a little more readily than something new. Carl and Moira were kind, knowing the nature of justice and the limits of punishment, and at last Tod was alive again.

He found himself one day down near the river, watching it and thinking back without fear of his own thoughts, and a growing wonder came to him. His mind had for so long dwelt on his own evil that it was hard to break new paths. He wondered with an awesome effort what manner of creatures might worship humanity for itself, and what manner of creatures humans were to be so worshipped. It was a totally new concept to him, and he was completely immersed in it, so that when Emerald slid out of the grass and stood watching him, he was frightened and shouted.

She did not move. There was little to fear now on Viridis. All the large reptiles were gone now, and there was room for the humans, the humanoids, the primates, the children. In his shock, the old reflexes played. He stared at her, her square stocky body, the silver hair which covered it all over except for the face, the palms, the soles of the feet. "A monkey!" he spat, in Teague's tones, and the shock turned to shame. He met her eyes, April's deep glowing rubies, and they looked back at him without fear.

He let a vision of April grow and fill the world. The child's rare red eyes helped (there was so little, so very little red on Viridis). He saw April at the spaceport, holding him in the dark shadows of the blockhouse while the sky flamed above them. *We'll go out like that soon, soon, Tod. Squeeze me, squeeze me*. Ah, he'd said, *who needs a ship?*

Another April, part of her in a dim light as she sat writing; her hair, a crescent of light loving her cheek, a band of it on her brow; then she had seen him and turned, rising, smothered his first word with her mouth. Another, April wanting to smile, waiting; and April asleep, and once, April sobbing because she could not find a special word to tell him what she felt for him. He brought his mind back from her in the past, from her as she was, alive in his mind, back to here, to the bright mute with the grave red eyes who stood before him, and he said, "How precious?"

The baby kept her eyes on his, and slowly raised her silken hands. She cupped them together to make a closed chamber, looked down at it, opened her hands slightly and swiftly to peer, inside, rapt at what she pretended to see; closed her hands again to capture the treasure, whatever it was, and hugged it to her breast. She looked up at him slowly, and her eyes were full of tears, and she was smiling.

He took his grandchild carefully in his arms and held her gently and strongly. Monkey?

"April," he gasped. "Little Ape. Little Ape."

VIRIDIS is a young planet which bears (at first glance) old life-forms. Come away and let the green planet roll around its sun; come back in a while—not long, as astronomical time goes.

The jungle is much the same, the sea, the rolling savannahs. But the life.

Viridis was full of primates. There were blunt-toothed herbivores and long-limbed tree-dwellers, gliders and bur-

rowers. The fish-haters were adapting the way all Viridis life must adapt, becoming more fit by becoming simpler, or go to the wall. Already the sea-apes had rudimentary gills and had lost their hair. Already tiny forms competed with the insects on their own terms.

On the banks of the wandering rivers, monotremes with opposed toes dredged and paddled, and sloths and lemurs crept at night. At first they had stayed together, but they were soon too numerous for that; and a half-dozen generations cost them the power of speech, which was, by then, hardly a necessity. Living was good for primates on Viridis, and became better each generation.

Eating and breeding, hunting and escaping filled the days and the cacophonous nights. It was hard in the beginning to see a friend cut down, to watch a slender silver shape go spinning down a river and know that with it went some of your brother, some of your mate, some of yourself. But as the hundreds became thousands and the thousands millions, witnessing death became about as significant as watching your friend get his hair cut. The basic ids each spread through the changing, mutating population like a stain, crossed and recrossed by the strains of the others, co-existing, eating each other and being eaten and all the while passing down through the generations.

THERE was a cloud over the savannah, high over the ruins of the compound. It was a thing of many colors and of no particular shape, and it was bigger than one might imagine, not knowing how far away it was.

From it dropped a golden spot that became a thread, and down came a golden mass. It spread and swung, exploded into a myriad of individuals. Some descended on the compound, erasing and changing, lifting, breaking—always careful to kill nothing. Others blanketed the planet, streaking silently through the green aisles, flashing unimpeded through the tangled thickets.

They combed the riverbanks and the half-light of hill waves, and everywhere they went they found and touched the mushroom and stripped it of its spores, the compaction and multiplication of what had once been the representatives of a very high reptile culture.

Primates climbed and leaped, crawled and crept to the jungle margins to watch. Eater lay by eaten; the hunted stood on the hunter's shoulder, and a platypoid laid an egg in the open which nobody touched.

Simian forms hung from the trees in loops and ropes, in swarms and beards, and more came all the time, brought by some ineffable magnetism to watch at the hill. It was a fast and a waiting, with no movement but jostling for position, a crowding forward from behind and a pressing back from the slightest chance of interfering with the golden visitors.

Down from the polychrome cloud drifted a mass of the golden beings, carrying with them a huge sleek ship. They held it above the ground, sliced it, lifted it apart, set down this piece and that until a shape began to grow. Into it went bales and bundles, stocks and stores, and then the open tops were covered. It was a much bigger installation than the one before.

Quickly, it was done, and the golden cloud hung waiting.

The jungle was trembling with quiet.

In one curved panel of the new structure, something spun, fell outward, and

out of the opening came a procession of stately creatures, long-headed, bright-eyed, three-toed, richly plumed and feathered. They tested their splendid wings, then stopped suddenly, crouched and looked upward.

They were given their obeisance by the golden ones, and after there appeared in the sky the exquisite symbol of a beauty that rides up and up, turns and spirals down again only to rise again the symbol of that which has no beginning and no end, and the sign of those whose worship and whose work it is to bring to all the Universe that which has shown itself worthy in parts of it.

Then they were gone, and the jungle exploded into killing and flight, eating and screaming, so that the feathered ones dove back into their shelter and closed the door.


And again to the green planet (when the time was right) came the cloud-ship, and found a world full of birds, and the birds watched in awe while they harvested their magic dust, and built a new shelter. In this they left four of their own for later harvesting, and this was to make of Viridis a most beautiful place.

From Viridis, the ship vaulted through the galaxies, searching for worlds worthy of what is human in humanity, whatever their manner of being alive. These they seeded, and of these, perhaps one would produce something new, something which could be reduced to the dust of Viridis, and from dust return.

AMAZING THING! *By Cooper*


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END AS A ROBOT

By

RICHARD MARSTEN

*Nobody could get away with murder
while Robicide was on the job*

THE story you are about to read is true. Only the names of robots have been changed to protect innocent household appliances.

My name is Sneadley, Robicide Division. My partner's name is Sneadley. My partner is my brother. We were sitting around smoking king-sized cigarettes when the phone rang. It was Sneadley, my cousin on the desk outside.

"Mike?" he said.

"Yeah. Give it to me. Don't spare me."

"Pancho Romulo," he said.

"Speak English," I told him.

"We got a 211 from WIC on the TT. Fish had a carry away with a grifter, and we put a hang on citation and dumped the dip in the high power tank. So I got out an APB and contacted AID, but I thought it was just a 4172 LAMC."

"I see," I said. "Go on."

"Well, it wasn't. The 510 mama sheet told me it was a robot. Name: Pancho Romulo."

"What about him?"

"He daid, Mike."

I looked over to my partner. "Dead robot," I said. "20th and Main."

Over the phone, my cousin said, "Gee, Mike, how'd you know?"

"That he was dead? Simple," I said. "You told me."

We checked out an RMP car at 2201 by my watch. My brother's watch read 2202. The clock on the station wall read 2203½. We checked out an RMP car.

We took the fifth level to 17th, dropped down to the third level on 18th, the second level on 19th, and the first level on 20th. On 20th and Main, we found the dead robot.

He was small as robots go. He looked ratty. He had yellowed brass teeth and stringy hempen hair. The top of his head had been blown-off, and his tubes and wires were scattered all over the sidewalk.

My brother's name is Johnny. "It's not pretty, Johnny," I said.

"Robicide never is," he told me.

I leaned down and checked the ID tag soldered into the skinny robot's chest ease. "Pancho Romulo," I said, reading off the name.

"Sounds familiar," Johnny said.

"Mmm." I read on. "Serial number 312-44-66031. Factory: Michigan Aluminum."

"A good outfit," Johnny said.

"Mmm." I read on. "Parts: General Electronics. Occupation: Roboscribe."

"A scribe," Johnny said.

"A roboscribe. There's a difference."

"Sure."

"This ought to be easy," I said.

"Yeah? How so?"

"All we got to do is find the killer".

ABOUT ten minutes later the boys in the white truck showed. The lab boys had already taken all their photographs, and the rest was just a matter of garbage disposal. I watched them dump the remains of Pancho Romulo onto the movable track, and then the skinny, lifeless robot was moving up, up, and into the bowels of the truck with the rest of the garbage. There was something sad about it all. I wept bitterly.

"Don't be bitter," Johnny said.

"All that aluminum," I said, my fists clenched. "All those wires and tubes. Twisted, and mangled, and out of shape. All because some lousy, rotten, metal-hating rat had to . . ."

"Now you're talking like Mike Sneadley," Johnny said happily.

"Let's go," I said. "First stop, Michigan Aluminum."

We caught the Michigan-bound rocket from Idlewild. We weren't used to the force of acceleration. Both Johnny and I vomited.

Later, enjoying chocolate fudge chopped-nut sundaes in the employes' cafeteria at Michigan Aluminum in Lansing, Michigan, we spoke to the president of the night shift.

He was a balding robot in his rusting thirties. He sipped at his petroleum malt and eyed us casually.

"You think this Pancho Romulo was killed, huh?" he asked, his voice metallically precise.

"We have reason to believe so," I told him.

"Shame," he said. "Pity. We used good aluminum on him. I remember."

"How come you remember?"

"I remember because we ran out in the middle. Had to make him shorter than most."

"In the middle?"

"All over. He was a short robot."

"Short robots die just the same as tall ones," Johnny said.

"Ain't it the truth?" the president said, nodding his head.

"Why do you say that?" I asked suspiciously.

The president smiled. "Because they do, don't they?"

"He's right, Mike," Johnny said.

"Just watch what you say," I told the president.

"Easy, Mike," Johnny said.

"Sure; easy, easy. Only that lousy, metal-hating rat is still out there somewhere, still roaming the streets. When will he strike next? And who will it be? Easy. Yeah, easy."

Johnny calmed me down, and we left the night-shift president as he dug into a sulfide salad. We were no closer to the killer than we'd been two minutes ago.

We staked out Michigan Aluminum, just in case. The plant ran for more than 3,000 acres, but we put two of our best operatives on the job. We gave them their instructions, and then we headed for General Electronics.

The female robot who greeted us in the reception room was tall and loose-hipped. She walked on ball-bearinged joints, and her metal skin shone like dull ivory. Her eyes were emeralds, and her teeth were pearls, and her lips were rubies. She had class, all right. You could tell it at a glance.

MR. SCHLEMMER ain't in," she said, "and he ain't expected. There ain't nothing he can't do for you that I can't do for you anyhow," she said.

"What's your name, ma'am," I asked.

"Eileen," she said. "Eileen Alloy."

"What do you know about Pancho Romulo?" Johnny said.

"Him, huh?"

"What about him?"

"I remember him," she said. "The short one. Always making passes. I remember him, all right."

"He made a pass at you?" I asked.

"He tried to make me," she said.

"And did he?" Johnny asked innocently.

"Did he make Eileen Alloy? Did he make *me*? Are you kidding, buster? Are you kidding or something?" She paused. "Yes," she said girlishly, "he did."

"Am I to understand he worked on the assembly line here?" I asked.

"That's right. He was a passer, Pancho was. We needed a short robot who could reach up under the fixed tubular discharger. He filled the bill nicely. When the parts were discharged, he reached up for them, and then passed them on to another man who put them into the aluminum bodies. He was always making passes, Pancho was."

"And he made you?"

"By passing the works, sure."

"I see," I said. "But his ID tag described him as a roboscribe. If Pancho was a passer . . ."

"Oh, that was later. Then he became a roboscribe. He thought he had talent. You should have heard some of the yarns Pancho told. He was very good at making up things."

"He left here to become a roboscribe?"

"That's right. Matter of fact, we fitted him up with his plotting spools. And his twister, of course."

"Of course," I said. "What kind of scribing did he do?"

"Mysteries. We had some old spools, so we stuck them in Pancho's head. I think they figured on humoring him, you know. My God; who'd have thought?"

"Who'd have thought what?"

"Who'd have thought it would work? I mean, those crummy spools, and that worn-out twister. I guess people will buy any kind of junk nowadays."

"I don't buy that," I said, slamming my fist into my open palm.

"You don't buy what?"

"There's more to this than meets the eye. Don't leave town, Miss Alloy."

"Me? Why would I want to leave town?"

"He's supposed to say that," Johnny explained.

"Oh. Pleased, I'm sure," Eileen Alloy answered.

We left town. Something kept eating at my mind. I took off my hat and asked Johnny to look for a louse or something.

"Nothing there," he said.

"No, but there's a louse in this someplace," I said.

"Like my wife always says . . ."

"Don't drag her into this," I told Johnny.

"I was just . . ."

"I said . . ."

The time was 0000.

WE put down in Idlewild at 0000 $\frac{1}{4}$. We checked in at 0005. The Skipper was in an uproar.

"You think the city pays you for pleasure excursions?" he ranted.

"No, Skipper," I said.

"You think you got nothing to do but run around Michigan?"

"No, Skipper," I said.

"I want results," he shouted. "Fourteen karat results. Not pettyfogging, and not goldbricking, but results! Plain old ordinary results! That's what you get paid for, isn't it?"

"Yes, Skipper!"

"Damn right it is! You think it's nice, robots lying around with all their tubes exposed? How'd you like to lie around with all your tubes exposed?"

"I wouldn't, Skipper."

"No, and neither would I! So get me results. Put all the men you need on this case. Take O'Shea Cradnerry from Ballistics, and Otterlee Clock from the Morgue. Get Zach Mazinov if you need him, and even Hubert Stratoline. Get me results!"

"We'll do it alone, Skipper," I said tightly.

"All right, smart boy, all right, big-shot city detective. Just remember this isn't a 211, and it isn't a 311, nor is it

a 484 PS. This is robicide, big shot detective, and if you don't crack this case you'll be back pounding a beat in Brooklyn. Yes, dammit, I said *Brooklyn!*"

"Easy, Mike," Johnny said.

I cringed out of the office.

We got our first steer from a vag in night court.

The steer was a big black one, with malicious looking horns.

"What's this all about?" I asked.

"Pancho's housepet," the vag said.

"So?"

"Look at the hide."

I stepped around the horns, and the steer eyed me maliciously. I looked at the hide. There were two footprints on it.

"What's it all mean?" I asked.

"Somebody cut out a pair of soles from this poor beast's hide," the vag said. "Somebody needed shoes desperately."

"Who?" I asked.

"That's easy," the vag said. "A big-shot detective like you should be able to figure it."

"All right," I said, "if you want to play it tough, we play it tough. We know you been pushing Corradon, vag. We know it because we spotted you with six bundles of the junk. We also had you staked out when you received those eighteen syringes. And don't think we ain't aware of the white slavery you been indulging in. Only reason we haven't pulled you in before this, vag, is because you're my father: Now, are you going to explain all this, or do you want me to forget that blood is thicker than bourbon?"

"Easy, Mikie," the vag said.

"Easy; sure, easy. What do those footprints mean?"

"Simple. They're a size 9 $\frac{1}{2}$ double E. Only one robot in town wears a 9 $\frac{1}{2}$ EE."

"Who's that?"

"Pancho Romulo."

"Those are mighty big shoes for such a little man," Johnny said.

"Maybe he was trying to fill them,"

the vag said. "I figure the hide was taken from this steer a few years ago. That was before Romulo's stuff began to click."

The steer made a noise.

"Shut up, you!" I snarled. "We got plenty on you, too, if you want to play it rough."

The steer lowered his head.

"Like a certain cow in Jersey, if you want to get specific," I sneered. "Don't fool with us, mister."

The steer didn't answer.

"Come on," I told Johnny. "Let's check those goddamn shoes."

THE robot who answered the door at Pancho Romulo's downtown apartment was a big one. He had sapphire eyes and a diamond smile on his face. He let us in, and I said, "Excuse me," and bent down to inspect his ID tag.

"You a roboscribe?" I asked him.

"Yes," he said.

"What's your name, sir?"

"Schnarr Trapper," he said.

"All right, Schnarr, what are you doing here?"

"I work here."

"Doing what?"

"Answering doors and things."

"I thought you were a roboscribe."

"I am."

"All right, Schnarr," I said, "if you want to play it rough."

"I'm at liberty," Schnarr said, "that's all. Between assignments, so to speak. Pancho was good enough to take me in, answering doors and things."

"That's better," I said. "What things do you answer?"

"Telephones, fan letters. Oh, Pancho gets a lot of fan mail."

"Got, you mean," I said.

"Got?"

"Got. He said."

Schnarr Trapper looked at me in astonishment. "Dead? Pancho dead? Dead, did you say?"

"You didn't know about it?"

"No. Good Lord, no. Pancho dead? Oh Good Lord."

"What size shoes do you wear?" I asked suddenly.

"10½ B. Why?"

"Routine."

"Oh. Dead. Poor Pancho. Dead. How did it happen?"

"Somebody bashed his head in."

"Poor Pancho. Poor, poor, Pancho. Dead. And gone. Dead and gone."

"Both," I said. "What kind of scribbling do you do?"

"Mystery stuff."

"Ah-ha?"

"Yes."

"Mmmm."

"You liked this Pancho Romulo?" Johnny asked.

"Liked him? Gãd, I loved him," Schnarr said. "My idol, my hero, the scribe I wanted most to be like. With Pancho gone, it'll be a sad world for 'tec fans."

"What kind of fans?"

"Tec fans. You've never been to Venus?"

"No, never."

"There's a bird there, the *snorutec*. Beautiful plumage. Pancho had fans made from the plumage, 'tec fans. He ordered a lot of them when he was alive."

"I see."

"Why did you ask me about shoes? Does 10½ B have anything to do with Pancho's killer?"

"That's about the size of it," I said. "We got a steer a little while back. Two shoe soles cut from the steer's hide."

"That was a bum steer," Schnarr said. "Pancho picked him up reading the *Hobo News* a long time ago?"

"Who cut those shoe soles from the steer's hide? That's what I'd like to know."

"Why, Pancho did," Schnarr told me.

"Why?"

"He was down and out, holes in his soles, heels peeling, laces defaced, stitches missing. He cut himself a new pair of soles from the bum steer. That was before Pancho became a big-shot

city detective writer."

"How? How did he get where he was? They gave him lousy plotting spools, and a wornout twister. How come he rose to such heights?"

Schnarr Trapper looked at me levelly. "I don't know," he said.

"We'll find out, Schnarr," I answered. "Don't leave town."

WE PICKED up an SOB on the IRT the next day. AID checked him out, figured him for an MWA and dumped him into the CAN. The time was 1341.78642.

Johnny and I went down to the SCRAP HEAP.

The aluminum cases of robots gleamed in the midday sun, empty and barren, lifeless.

"Makes you choke up," I said to Johnny.

"Urghh," Johnny said.

A woman was there looking over the dead robots, searching among the rubble. We looked around until we found the remains of Pancho Romulo, and then we went over them carefully.

"Legs in fine order," I said.

"Haven't seen better in a long time," Johnny agreed.

"Nice chest."

"Mmmmm," Johnny murmured appreciatively.

"Short, true," I said, "but they don't make chassis like this any more."

"You said it, Mike," Johnny said enthusiastically.

"Built for endurance," I said.

"Yeah," Johnny sighed wistfully.

"She's leaving, Mike," he said.

"Who's leaving?"

"The girl. The one rummaging around out there. Man," he said.

"Look at this robot!" I shouted. "Pay some attention here."

"Easy, Mike. I

"Sure, easy, easy. Look at his head. All the tubes are gone, shattered, destroyed. And the plotting spools and twister. Stolen."

"Who'd want to steal..."

"Who indeed? Who'd want to steal old spools and a bad twister? Unless..."

"Unless what, Mike?"

"You're a big-shot city detective's partner," I said bitterly. "You tell me."

"But..."

"That's the first sensible thing you've said for the last twelve pages. Let me have one."

"Let you have what, Mike?"

"A king-sized cigarette, you damned fool."

Johnny butted me. Then we staked out the suspect's home, and later had a steak out on Long Island in a place where truck drivers stop.

We got the RBI on the car radio on the way back to the city.

"They'll take it next year," Johnny said.

"Maybe," I told him. I was thinking. Something was gnawing at my mind. I let it gnaw.

"Something gnawing at you?" Johnny asked.

"Naw," I told him. I continued driving. The radio told us about a heel and toe on the fourth level, and a punch job at 60th and Broad. After that, we got the Hit Parade.

"Music, alla time music," Johnny complained. "You're just a jazz fiend, that's all."

"Dom, da-dohm-dohm," I hummed. It was all crystal clear now, clear as a bell. I had my man, and all we had to do was wrap it up.

AFTER we passed our way through the stakeout men, we went up to the apartment. I knocked on the door.

"Who's there?" the voice called.

"Police officers. Open up."

"Come and get me, copper"

I kicked the door open, and then I kicked Johnny into the apartment.

"Careful!" Johnny yelled. "He's got a heater."

The heater blistered three feet of paint from the door jamb. I fired twice from the hip with my .32 S. & W., nickel-plated, walnut-stocked, raised sight,

twin-notched, rapid-firing disintegrator.

I missed.

I made a flying leap across the room, and he came down in a tumble of metal, clattering like a thousand drunken pots and pans.

"All right," I said. "Want to tell us all about it?"

"No," Schnarr Trapper said.

I scratched my head. "What do we do now, Johnny?"

"He doesn't want to tell us all about it?"

"That's what he said," I told Johnny.

"Mmm. That makes it a little tougher."

"We'll just have to sweat it out of him," I said.

Schnarr Trapper sneered. "Robots don't sweat," he answered.

We put him under the can openers at HQ, and it was just a matter of time before he spilled the beans.

It was a simple case. Pancho Romulo had stolen Schnarr Trapper's superior spools and twister. He then hired Trapper as a manservant, while he himself

rose to fame and glory as a mystery writer.

Trapper bided his time, waiting for the chance to steal back the superior plotting spools and twister that rightfully belonged to him. He finally found the opportunity. He discovered that once you bashed in a robot's head, all the spools and the twister were exposed. He had seized his opportunity, and also the spools and twister.

The case was closed.

Schnarr Trapper was tried in Superior Court, County of Cork, State of the Union, on December 25, 2937. He was found guilty of stealing his own spools and twister, Section 31-A of Penal Code 17-B, a crime punishable by demolition. He was utterly demolished.

Detective-Sergeant Michael Snedley, for outstanding work in breaking the case, received a gold star in his Merit Column, and was elevated to the position of a high-priced radio and television performer.

Crime sometimes pays in

THE END



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A gorgeously-plumaged creature lighted on the tree

THE WALL

By CHARLES A. STEARNS

No barrier can be made
high enough to keep out
the darkness which lurks
in the human heart. . . .

THREE brights and four darks past Egg Day, G'bork discovered the plexial node, or button, which nature had, cunningly concealed in the long, white hair of his abdomen. 'So intensely clever did this make him feel that he quite forgot where he was going, and

sat down to regale his eyes with the contemplation of that marvelous belly.

Solemn, purple eyes they were, that sensed not merely the warp of things, but the weft, and the nature of the component atoms as well. Which was no mean feat, and remains, to this day, almost unheard of by those of us who are not fortunate enough to have purple vision.

"What is *this*?" demanded G'bork, managing to sound completely outraged, though in truth nothing could ever upset his babyish good humor. "What have we here?"

(Certain pre-revelations, necessary for his survival, had been imprinted upon the brain of the unhatched fetus, and now the answer whispered from the depths of his subconscious.)

It spoke of the approaching miracle of the Blue Rain, when the jungle would stir with sudden dysphoria; the damp, silvery bud become, in one split second, a nova of burgeoning color; the graceful nymph in the neptane pool at his feet emerge a loathsome batrachian; a thousand Ugly Duckling stories be spun in a single warm breath of the *nedder* wind beneath every rotted grey leaf; the chrysalis of Time, itself, burst into a billion shards, with one self-contained continuum for each and every denizen touched by a drop of the Blue Rain. It hinted of life beyond life.

"Life beyond life?" repeated G'bork. "What kind of talk is that?" He was prepared to begin a solitary harangue upon the unsatisfactory nature of instinct, except that *she* was omniscient, knew quite well that he had stopped there by the pool, and would not be denied.

Since the hour of his hatching, by means of a rapport telepathic in nature, she had called him, and he had been compelled to keep moving. The nature of her wish he could not fathom. A league or more of the most absolute wilderness still separated them, but even now he felt her touch his brain again, caressing—an impatient caress.

"*Hurry along!*" she said.

"I *am* hurrying," said G'bork, and shinnied up a feather tree so precipitately that he clawed off half its fronds. He shaded his eyes with one paw, but despite their keenness he could see nothing. "You keep moving!" he erupted. "How can I catch you if you won't wait for me?"

"*Does the calisflower pursue the fly? I am slow and must feed. You are small, fast, and very succulent. Keep moving.*"

"How does one feed?" said G'bork.

"*A grub does not take food. Keep walking toward me, and I will show you what it means.*"

(So that's what he was—a *grub*! It was thrilling knowledge. The very concept had a plump, delicious sound.)

G'bork climbed down and resumed his journey at once, for the anticipatory visions of the mysteries of feeding drove him wild with curiosity.

THE jungle steamed. Slate-grey saurians with leathery wings circled overhead constantly. Once, G'bork watched, spellbound, as one of them dived out of the sky to catch a large, green, many-legged *thing*, which kicked and cried, and manifestly did not want to be caught.

Two more of the saurians swooped down to help the first pick the captive to pieces. As they brushed over G'bork's head, he was able to read their rudimentary thoughts quite plainly. They were thoughts of feeding, of hunger.

"If that, is feeding," soliloquized G'bork, "it must be extremely unpleasant for one's food, and I do not think I shall have anything further to do with it." Nevertheless, he became so preoccupied with watching the grisly work of the serpents of the air that he did not notice that he had trodden upon a small, cone-shaped mound of leaves.

It was the humble home of thousands of chips of hurtful iridescence, who swarmed upon him in an instant, causing him to howl in agony and roll over on his back with his six legs clasped

instinctively about his abdomen.

He understood their mindless rage, and felt a new, bitter sensation, which was fear. Presently they left him alone, however, and he retrieved his *elan* at once. "That was interesting," he commented, "but I should not care to experience it often."

"Hurry, hurry!"

"Why must I always hurry?" complained G'bork, a bit testily, for his paws smarted.

"Because the hour of metamorphosis is almost at hand, and I am still hungry."

"You may eat without me," said G'bork. But he was puzzled. "Metamorphosis?"

"The time of the Blue Rain, when I shall no longer be able to control your brain for you. I cannot explain it."

Actually, G'bork would have preferred to live his own life, but he was stimulated to increase his shuffling pace to a zombie gallop for awhile, until she grew absent-minded once more. Then he could stop to sniff, feel, sense, and examine the darkening sky until she roused up and prodded him on again, mind-lashing him when he fretted at the pace.

An hour passed, and G'bork, who had the erroneous idea that it was not necessary to watch where he was going, since he was not going where he wished anyway, was running with his head between his paws.

He hit the wall an awful thump, and it was inexcusable, in that he had purple eyes, and saw not.

Dazed, G'bork drew back several yards and stared at the smooth, unyielding barrier before him. It was lofty, and stretched to the right and to the left of him, as far as the eye could see.

G'bork stood upon legs five and six, stretching to his extreme height of thirteen inches. "Absolutely incredible!" he exclaimed.

But she seized his brain, suddenly, with anger immense and black, for she had reached the wall too, and was baffled

by it. "Where are you?" she said.

He answered quakingly, and she turned, parallel to the wall. Now realizing that they were both on the same side of it, she was bearing down upon him. Less than a hundred yards away the snakereeds whipped and shuddered as from the passage of a heavy wind.

G'bork climbed a willowy feather tree, which bent under his weight until he could drop to the top of the wall. It was flat and smooth, and made an admirable perch.

Beyond the wall lay open glades and meadows. A peaceful, inviting country where, he sensed, no danger might dwell.

But she was beneath him now, entreating, scolding, commanding, her mandibles working hungrily.

"No," said G'bork. "Positively no. I will not come down."

THE starliner was crowded with the pilgrims of the Blue Rain. Mr. Wilburn was out of place, and shabbily dressed. Also, he felt it incumbent upon him to listen to the prating of the one called Billup, not because Billup wore an enormous diamond stickpin in his crimson tie, but because there was not room to move around and escape him.

Billup was *nouveau riche*, and Billup's wife, who reclined in her seat beside Anna, was *nouveau riche*. Her ostentation consisted of a curious silver net affair that sat upon her head, with its dark and complex visor pulled down over her eyes. She was stout, and her clothing had untidily rumped as she lay there, but there was a faint, dreamy smile upon her face.

"Well, well," said Billup for the fourth time. "So you're a schoolteacher, Wilburn. I suppose somebody has got to do that job. Me, I wouldn't have it. Not in a million years!"

Nor could you qualify for it in a million years.

"Yep, I was telling Vesuvia—that's my wife—only this morning, that she's pretty lucky. I'm a self-made man, you

know. Climbed up that ladder from office boy to vice president of the Trans-lunar Fidelity Trust."

All this was in an unnecessarily loud voice. "I see," said Mr. Wilburn.

"You people going to the Valhalla?"

"Yes, we are."

"So are we. Not that I've got any faith in this Blue Rain thing myself. Matter of fact, we're all as healthy as hogs, but I told Vesuvia, I said, everybody that is anybody is going this year, and so we might as well bring the kid along and get ours. Right?"

Mr. Wilburn nodded.

Billup grinned suddenly. In a lower tone he said, "Ever meet my wife?"

"No."

"That's Vesuvia over there with the damned iconophone on her head. Sprawled all over the aisle like a slut. Cost me a fortune, that gadget. You put it on and it runs off a cosy three-D Hollywood movie for you, private. If you're too lazy for sex, like Vesuvia, you can slip it on at night and—" He broke off with a snicker. "I'll bet she's got a two hour skit of Cary Kalman bedroom scenes in that thing right now."

Vesuvia Billup removed the silver net helmet from her hair and placed it carefully in her lap. The iconophone was very fragile. It had taken her many months of nagging to get it, and she cherished it a good deal more than anything else in life, including her husband.

She turned, with hollow, dark-ringed eyes that seemed out of place in her round face, and looked at the woman beside her. "You're Mrs. Wilburn, the schoolteacher's wife, aren't you?" she said.

"That's right," said Anna, warmly smiling with not only her lips, but her expressive blue eyes as well.

VESUVIA took in the serenely lovely face, the unlined brow, the immaculate brown hair, and most of all, the inexpensive, ready-made suit, with a critical eye. "You're a lot younger than your husband," she said.

"Only a little over two years."

"Hmmp!" said Vesuvia. "Going on the pilgrimage?"

"Yes, indeed!" said Anna. "And it's all so wonderful that I can hardly believe it."

"So are we," Vesuvia said, "but only because of that brat of Marvin's." She pointed to a golden-haired child who stood nearby.

Anna was not looking at the child, but at Vesuvia.

"That's Virginia, my stepdaughter. Oh, she's a brat, all right! Don't let that angel face fool you. She's mean as she can be. A real burden, I'll tell you, and Marvin—that's my husband—won't even let me box her ears. Thinks she's a regular card, Marvin does. I wish I had a box of chocolates. Gets everything she wants. Wanted a dog. A dirty, nasty, little dog. I wouldn't hear of it, so we got out of it by promising her this trip.

"Marvin says it will cost fifteen thousand, but he can afford it. I know one thing, I'm going to do some shopping in Polarport before we go home."

The loudspeaker, blaring suddenly, warned them to fasten their seat belts.

"Virgini—ah!" shrilled Vesuvia Billup. "Come over here and get in your seat!"

"Are we landing?" asked Anna.

"In a few minutes," said Vesuvia indifferently. "You'll have to rent a copter to get to Valhalla, though. It's more than five thousand miles south of Polarport. An eight hour trip at least. Here it comes. If they break my iconophone with a rough landing—" With the threat unfinished, she clutched the precious object to her ample bosom and closed her eyes.

But the landing, when it came, was a gentle bump, scarcely felt. They were on Venus.

The Venusians, dark gray creatures who were only superficially humanoid in appearance, and looked, as Virginia commented, "as though they are mouldy," swarmed over the ship. The Bill-

ups had a great deal of baggage, but Mr. Wilburn was able to carry all of theirs, including a very light tent, insulo blankets and food concentrates, under one arm.

There were hosts of Terrans in Polarport, and thousands of copters lofted each hour, heading south to the equatorial domain of the Valhalla, an immense parkland of "cleared" jungle where the pilgrims would camp in tents, or in the open, and enjoy the salutary mists of the Blue Rain, which would commence soon and continue for a few hours before lapsing into the ordinary rainy season.

Billup made a deal with a furtive, wrinkled Venusian in a blue robe for a deluxe, six-passenger copter. A thousand dollars passed between them.

Mr. Wilburn, who had seen the sum, paled inwardly.

"Want him to fix you up?" said Billup. "Sure, he's black market, but transportation is tight, and all the regular channels sell out a year in advance. I'm doing you a favor, Wilburn, putting you onto this fellow."

MR. WILBURN took out his thin wallet, cherishing a sudden, numb resentment for all the multitude around him, with its fine holiday gear, its shining, streamlined ships, and its opulence. He made the very best deal that he could, and when it was finished there remained in the wallet exactly fifteen dollars and their tickets back to Earth.

They had leveled off at an altitude of one mile. Mr. Wilburn stole a guilty glance at his wife, who was curled up in the seat beside him, staring at the torn fabric of the overhead.

The copter blades shuddered, all at once, as though they might wrench themselves from the shaft.

"I should never have taken this wretched old thing," he said.

"But you couldn't disappoint me?"

"No, I couldn't," he said, as though that were an established fact. "I am a poor sort of provider, but you shall have

this chance, my dear. You shall have it."

She laid a hand on his arm. "You are the most wonderful man in the world," she said softly. "But you must remember that *all* of these people are seeking a miracle at Valhalla—at least subconsciously—and the Blue Rain works its magic only on a few. You must not be disappointed if nothing happens."

"No," said Mr. Wilburn gruffly, "you are wrong. Most of them, like the Billups, are simply greedy holiday seekers."

"Perhaps it merely seems so. Have you noticed that Billup's laughter is hollow-sounding? And that poor child!"

"You are overimaginative, my dear," said Mr. Wilburn. "And, speaking of the Billups, I'm afraid we're stuck with them. Their ship is just ahead of us—a big, red copter. You see, there is no oscillochart in this little two-seater, and the only way we have of knowing on course is to follow Billup, who's been kind enough, at least, to invite us."

"Tell me about Valhalla," said Anna.

"I only know what I've read. It is more than fifteen hundred square miles of forestland along the equator of Venus. There is a high wall around the park, so they say."

"Why?"

"To keep the tourists from wandering away into the pestilential jungle, I suspect, though there is a frightening legend—"

She turned her head slowly. "Of what?"

"Well—it is said that there is another reason for the wall. A thing right out of a nightmare, which the explorers of the last century appropriately called *Jagannath*. It was supposed to have been an intelligent creature, rather like a monstrous crab in form, with a hundred whip-like tentacles, and practically indestructible by ordinary means.

"A few were wiped out with fire-bombs, but since no one could find how they bred, and they seemed to have a telepathic sense of danger, the cost of their destruction came too high. They moved slowly through the jungle, de-

stroying or devouring everything in their path, and so the wall was built to keep them out of the park.

"The natives," continued Mr. Wilburn, "swear that *Jagannath* is not of Venus at all, but came here thousands of years ago from a terrible place called Bedkial—which is their version of Hell. I hope that I am not frightening you, Anna?" He stole a quick glance at his wife.

She was fast asleep. "Huh!" said Mr. Wilburn wryly.

SIX endless hours droned past Mr. Wilburn, who was near-dozing at the controls, when the radio suddenly crackled and Billup's deep voice came through. "You still there, Wilburn? How you making out in that cheesebox?"

"Very well, thank you."

"You'd better keep up. See that open stretch? That's the beginning of Valhalla, and the white line is the wall. I'm heading for the southwest corner. Lot of room there, because everybody congregates at the northeast side, where the government station is located. We'll have a million acres to ourselves."

"Do you think it is wise to isolate ourselves?" said Mr. Wilburn.

"You can do as you like," said Billup coldly. "I'm only doing you a favor, Wilburn, letting you tag along."

"Of course, I'll go wherever you say."

Billup laughed. "That's fine," he said.

Presently they were setting down the copters in a small natural clearing, and Mr. Wilburn helped his wife to the ground, laid out their meager belongings, and went over to help Billup unload his mountainous supply of gear.

There was a portable water converter and shower bath, four cameras with much accompanying paraphernalia, an electronic cooker with over a hundred pounds of frozen foods, half a dozen insect nets, thirteen plastic clothing containers, eleven of which belonged to Mrs. Billup, three hammocks, and a portable video.

There was also Mrs. Billup's precious iconophone, which she had held in her

lap all the way. She would not allow anyone to touch it until she discovered that it would be impossible for her to lower her ponderous body to the ground without first yielding it up.

She gave it into the hands of her husband, with shrill warnings. He pretended, as he took it, that he was going to let it fall, dropping his hands away from it as she released it and catching it a scant six inches from the hard, rocky ground.

"Haw, haw!" Billup said. "Bread and butter!"

Vesuvia shrieked.

Virginia, meanwhile, had already disappeared among the cycad growths that were everywhere around them. Neither of her parents seemed to worry about her absence.

Vesuvia Billup made her husband stretch a low hammock for her and sank into it without ceremony, clamping the iconophone upon her head as she did so.

Mr. Wilburn went back to his camp and set up their own small tent while Anna shifted the scented air appreciatively and remarked at the freshness of the coming breeze.

"Would you like to take a walk," asked Mr. Wilburn in a low voice, "so that we can be alone?"

"Oh, yes! The park is very beautiful, isn't it?"

"Indeed. And in less than six hours, according to the forecast, the Blue Rain will usher in the wet season. It is a very special time for the native flora and fauna as well as for us. Did you know that?"

"Really?"

"Yes. It is the time of their metamorphic change. It is the same as our lower life forms on earth experience, except that the change, so I am told, is abrupt, and dramatic—even startling. There is never any intermediate or chrysalis stage."

ISN'T someone calling you?" Anna said.

"It's Billup," said Mr. Wilburn. "Looks

as though we didn't make it."

"Wait for me!" Billup was shouting, and caught up with them, panting for breath. "Always like to be neighborly. I was just telling Vesuvia, 'why be snooty?', but she has already stretched out with that damned thing on her head, and she'll probably stay there until we leave for home. A dinosaur could lumbar across that hammock without rousing her. Me, I'm more democratic."

A gorgeously plumaged creature suddenly flashed across the clearing before their eyes, and lighted on the side of a tree, fanning itself gently with its multi-layered wings. Neither a bird nor an insect, it was a miraculous sight in this land of drab greys, where the direct rays of the sun had not fallen in a billion years.

"Stunning!" breathed Mr. Wilburn.

"Sst!" grinned Billup. "I slipped a pistol past the customs. That's why I wanted to camp down here where there are no patrols. We can have some fun." He took the weapon from his pocket and aimed it at the bright, pulsing thing on the side of the tree.

"Wait," cried Mr. Wilburn.

He was too late. Billup fired. When the carbon pellet struck, the creature exploded in a white flame.

"Well, I'll be damned," Billup said crossly. "Not even one little feather left! I guess it's on account of the Blue Rain. Friend of mine who was up here last year told me that he shot a big, furry thing that was about ten feet long. It busted up into a million little caterpillars when he hit it, all running which-way-to-Sunday. Had a hell of a time burning them all up with a flame rifle, he said. Must have been a regular riot."

Mr. Wilburn felt a quieting pressure upon his arm. It was Anna, his bulwark, as usual, in need. He swallowed his biting anger.

At that crucial moment Virginia ran out of the shadows toward them, hair flying, eyes wide with excitement.

"You know what?" Virginia said breathlessly, "there's a dead Venusian

lying over there, beneath the wall!"

The Venusian lay prone, with leathery, boneless arms outstretched as if to grasp the safety of the stony ditch that ran along the wall. He wore only the loin cloth of a hunter. Besides the short spear all natives affected, he carried an Earth-style carbine strapped to his back.

"The poor fellow must have come over the wall," said Mr. Wilburn.

"Then he's probably contaminated," Billup snapped, "Don't touch the boulder. Look there! Red splotches all over his body; might be some hellish disease."

Mr. Wilburn paid no attention. "Wait here," he said to Anna. He went over and knelt beside the Venusian. The spots, obviously, were not of infection, but apparently ruptured vascular tissues, where dreadful suckers had been recently attached to the skin and been wrenched off, skin and all, by the desperate victim. He was not dead. Mr. Wilburn felt for the heartbeat.

"**W**HY you confounded fool!" grated Billup. "I told you to stay away from him."

"He is badly hurt," Mr. Wilburn said. "There is no medical station other than first aid in the park. We must get him back to Polar City at once."

Billup's lips tightened. "Come on, Virginia," he said, "We're going back to camp."

"But I need help," protested Mr. Wilburn.

"Look," Billup said. "Up to now, I've been mighty good to you folks, but this is the parting of our ways. Don't be a fool. It would take sixteen hours to make the round trip to Polarport. The Rain would be over by that time. This trip has cost me a pretty penny, and I don't intend to give it up for one worthless native." He and Virginia left.

"I'll help you," Anna said.

"Thank you," said Mr. Wilburn, "but he isn't as heavy as an Earthman. If I can get him on my back I'll make it."

This he accomplished eventually, and

they made their way back to camp. Billup watched him from a distance, as he lowered the injured Venusian to a blanket which Anna had spread upon the ground.

"I have one request, Mr. Billup," said Mr. Wilburn humbly. "May I leave my wife here to return in your ship after the Rain?"

"Sorry," Billup said, "We'll be full up."

"Then may I borrow your copter, if I promise to return it to you after I take the native to Polarport? Ours is too small to carry the three of us."

"Nothing doing," Billup said.

Mr. Wilburn just stared at him for a full minute. Billup did not bat an eyelash.

"We can remove the seats, dear," Anna said quietly, "and we can leave our camping equipment here. It isn't worth much anyway."

"But to come so far," Mr. Wilburn said, embracing her suddenly, and holding her to him, as though agonized by the thought. "To come so far, and fail!"

"But we *haven't* failed," whispered Anna in his ear, "Don't you see that we were *needed* here to save a fellow creature's life? Now hurry!"

Mr. Wilburn went to work, making room for the Venusian to lie between them in the copter. Billup watched in sullen silence.

Suddenly Virginia began to cry.

"What's the matter with you?" roared Billup.

"I'm scared!" Virginia wailed. "Something dreadful is going to happen to us; I don't like it here! I want to go home!"

"Shut up and go play!" Billup said.

Mr. Wilburn got the injured Venusian aboard at last, and the ancient motor whirled into life. The copter heaved, jounced, and finally cleared the ground, gaining altitude very slowly.

After a time he set the course due north by the tiny compass.

Anna was smiling brightly. "If you'll help me," she said, "I think I can administer a shot of penicillin while we're

flying. There's sure to be a vial of it in the first aid kit, and it might help him."

"Of course," said Mr. Wilburn, with a lump in his throat.

"Will you take my hand," she said, "and place it upon the first aid kit."

AT THE moment when Virginia called him, G'bork was having a rather unpleasant moment. He had been in heated discussion with her that lay monstrosly at the foot of the wall where he perched, shivering. She had been winning, for the tug of her will was frightfully strong.

"No," repeated G'bork, but less forcefully than before, "I don't want to come down."

"Why not?"

"Because I am reasonably certain that you intend to eat me."

"What nonsense! Now cease your embryonic idiocy and climb down before the Blue Rain begins."

G'bork found himself edging to the rim of the wall, despite all his will to resist, and experimentally waving one foot over the side. And then he heard Virginia's voice. She was on the *other* side of the wall, looking up at him. "Oh, look!" she was screaming, "A Teddy bear! Come down here, Teddy bear!"

G'bork thought her exceedingly cute, and quite the most interesting being that he had ever seen. He leaned far over and peered down at the exquisite, golden-maned creature. What a kind, gentle voice she had! He wriggled deliciously.

Came the bellow of another voice from among the trees: "Virginia!"

But Virginia ignored it. She stretched up her arms. "Come down here, you little old Teddy bear." She was not hypercritical of G'bork's multiplicity of legs, it seemed.

"Where are you, Virginia?" bawled the voice of Billup, getting closer.

G'bork drew a long, shuddering breath. "Why not go to her!" he thought. "There can certainly be nothing to fear in this soft, lovely creature."

There was a scratching sound behind him. He turned. She had reared up on the wall, with her feelers testing the air, her broad, slaty back shining with the moisture that was already in the air.

"Down!" she said, and he cowered before that mental blast. "And hurry, you little fool! I would not eat you. You are my own young. In a moment that wall will crumble beneath your weight, for you will be the same as I—Jagan-nath."

A drop of blue rain hit G'bork's nose.

"But I do not want to be like you," he said. "You are ugly."

"Nevertheless, the hour of change is at hand."

G'bork studied his abdomen with his immense, purple eyes and sensed that the paths of the electrons with his plexial node were, indeed, growing more erratic as they circled in their bright orbits like miniscule moons. But he was fairly certain, by this time, that despite the stimulus of the Blue Rain, the metamorphosis must still require a sudden physical shock or jar as a catalysis for the subcellular process that was to take place. He knew that if he went down there she would probably belt him good to hasten the process, but if he remained very quiet until the season was past, he might not change at all.

"What you are thinking is true. Nevertheless, I am still your will and

your directive mind. You will do as I command."

"I will not," G'bork said. But he knew that he could not hold out against her much longer, even though he must become a ravening monster the instant she got hold of him.

And on the other side of the wall, unaware that only three feet of reinforced concrete separated her from the terror of the ages. Virginia squealed, "Come on, Teddy bear! Don't be afraid, I'll catch you."

"Yes," G'bork told himself. "Here is my only chance, but I must be very careful, in my unstable condition."

"Come on—jump! Belly buster!"

"Very well," said G'bork to Virginia, "but you must catch me *very lightly*."

"Listen to him squeak, Daddy! I think he's talking to me."

"Virginia! Did you hear me call you? Hurry up, we're going home!"

"In a minute," said Virginia, still holding up her arms.

G'bork jumped, with his six furry legs outspread like wings, straight for the cradle of those soft, inviting arms. (But he made a purple prayer to the gods of the newborn.)

And Virginia, with a pleased-minx smile on her face, stepped out of the way.

"Bread and butter!" she cried.

Virginia played it the dirty way.

Would you like to trade your wife in for a new model?

Trade-ins, spare parts—is this surgery's next contribution?

What would happen if humans were treated like used cars?

FOR A SURPRISING ANSWER, READ—

TRADE-IN

By

WINSTON MARKS



One of Many Brilliant Stories Coming Next Issue!

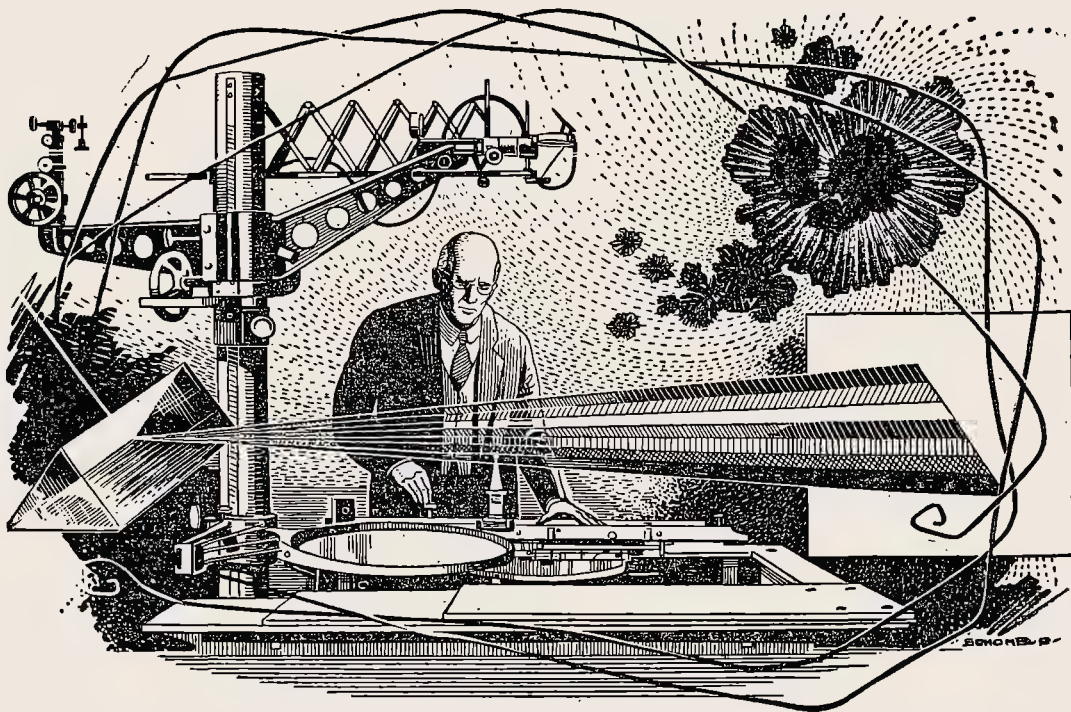


Illustration by ALEX SCHOMBURG

LOST: One Magnetic Field

By R. S. RICHARDSON

LOST: one magnetic field. In weak condition when last seen, but still alive. Finder please return to Old Sol. Liberal reward.

SOME such news item might be taken as typifying the general attitude of astronomers today toward a problem that has kept them guessing for nearly half a century. Does the sun have a magnetic field such as was apparently found in 1913 and 1923? If so, where has it

been hiding for the last twenty-five years? Will the field return when the new sunspot cycle starts soon? Or was the field, thought to have been detected earlier, merely an illusion due to errors in the observations?

Nobody really knows the answers to these questions.

One of the least understood subjects in science today is cosmic magnetism. (Probably every scientist would make

An Informal Discussion of Sunspots and Such!

this assertion about *his* particular subject.) This is rather unusual, for cosmic magnetism got off to an exceptionally good start way back in 1600 with the publication of Sir William Gilbert's *De Magnete*, a book that has been described as the first modern scientific treatise. After long thought and experiment, Gilbert came to the conclusion that the earth behaves as if it were a big spherical magnet. This statement is as true today as when Gilbert wrote it, but we still do not know for sure *why* the earth behaves as if it were a magnet or what keeps it in that condition.

Nowhere is new knowledge so eagerly sought as in cosmic magnetism. You can bet that those first men who go to the moon are going to take a magnetometer along with them. We aren't half so interested in those minerals they are always gathering in the magazines as we are in the moon's magnetic field. It is quite possible that we might secure this information from a robot rocket, without waiting for the development of a manned rocket.

In case anyone suspects that this is going to be another article like my *Aphrodite Project*, let me hasten to add that this proposal comes from Professor S. Chapman of Queen's College, Oxford, who for years has been one of the leading authorities on terrestrial magnetism. Chapman remarks that minute variations in the strength of the earth's field can now be measured and signalled back to ground stations, and it would seem to be feasible to try the same method on the moon. It would not be necessary to do any fancy guiding on the rocket—but only to get it within about a thousand miles of the moon's surface—to obtain very valuable information. Incidentally, that first moon rocket is going to have so many gadgets attached to it that it will resemble a Christmas tree.

BUT to get back to the sun .
The first major discovery Hale made at the Mount Wilson Observatory was

that every sunspot is the center of a magnetic field. The strength of this field ranges from about 4000 gauss in the biggest and blackest spots down to about 200 gauss in the little one-day spots. Such fields are small compared with the fields of several hundred thousand gauss that can be produced between the pole pieces of an electromagnet, but it must be remembered that in a sunspot the field exists over millions of square miles instead of a few square inches as in the laboratory.

After the presence of a magnetic field in sunspots was firmly established, Hale began to wonder if the sun itself might have a magnetic field similar to that of the earth. He knew that such a field, if it existed, would be so weak as to be barely on the limit of detection, with the methods then available.

It may seem incredible that we can hope to detect magnetic effects on the sun ninety-three million miles away. Most people live all their lives without even knowing that the earth is magnetized. The usual way of detecting a magnetic body—by its attraction for iron—can hardly be applied to the sun. But we have another method at our disposal that is even better for luminous bodies; indeed, it is so sensitive that it can be applied, not only to the sun, but to the stars as well, as we shall see later. This method makes use of what is called the Zeeman effect (after Pieter Zeeman, the Dutchman who discovered it in 1896).

Zeeman found that atoms in the presence of a magnetic field radiate in a slightly different way than when the field is absent. It is somewhat as if the atoms became self-conscious in the presence of the field and put some extra quivers into their performance—like a man shivering with stagefright while trying to make a speech. The magnetic field causes the spectrum lines emitted by the atoms to be split into two or more parts, depending upon a variety of circumstances. As a general rule, the stronger the field, the wider the lines are split apart.

In a weak field the splitting may be so slight that the lines appear only slightly widened. This is usually the case in sun-spots. In large spots the widening of the lines can be seen easily by inspection. In small spots it can barely be detected by the eye. Hale knew that the strength of the sun's field was probably only a tenth as strong as the field in the smallest spot. But the problem was so fascinating he decided to try for it, regardless.

No one was particularly disappointed, therefore, when measures on the first plates taken at the 60-foot tower telescope on Mount Wilson gave negative results. This tower was not adapted to work of this kind, and it was decided to postpone the investigation until the 150-foot sun tower was ready. This was completed in 1912 and provided a powerful research tool immediately. The lens at the top of the tower forms an image seventeen inches in diameter in the solar laboratory at the bottom. The visible spectrum of the sun in the region where the photographs would be taken forms a colored band sixty feet long. In small spectroscopes the two familiar lines of sodium vapor in the yellow are so close together that they often appear as one. But in the spectroscope at the 150-foot tower there are *eleven* other lines that can be seen between the sodium lines.

THE task of measuring the small displacements on the plates, due to the Zeeman effect, was turned over to a woman on the computing staff who had had considerable experience in this deadly-dull type of work. It is my considered opinion that measuring spectrograms is one of the most tedious jobs ever invented by man. It is certainly hard (for me at least) to measure for several hours and remain mentally alert so that my settings are not made mechanically. Also, when making measures that you know in advance should give a certain result, it is a constant struggle to keep your measures free from personal bias. Either you will unconsciously

strive to get the desired result; or else, in your anxiety, you will bend over backwards and come up with some entirely different answer.

In this case, every precaution was taken to prevent bias on the part of the observer, by marking the plates in such a way that it was impossible to tell what result should be obtained. Nevertheless, the measures indicated the presence of a weak magnetic field of about the type anticipated.

Measures made on the plates by other members of the staff, however, gave results that differed so widely among themselves that it was hard to know what to believe. It seemed desirable to find some method of measurement that would give more consistent results, regardless of whether they showed the presence of a solar field or not. A device that looked hopeful was a machine with which the displacements were measured by tipping a thin parallel plate of glass, rather than by turning a micrometer screw and making settings with a crosshair. But when the tipping plate micrometer was tried by two members of the staff the results were also negative.

Such was the state of affairs when Dr. Adrian van Maanen, a parallax expert, joined the staff. Since he was experienced in making fine measurements, he was asked to try his hand on the plates taken for general magnetic field. His first measures with the new machine gave negative results like the others. But, with more practice, his measures became more consistent, and gradually began to reveal displacements indicating a magnetic field. By 1913 he had obtained results of such a definite character that the evidence for a field seemed quite strong. Additional measures made in 1918 yielded essentially the same result as before.

This led Hale to announce, in February, 1918, that the results "seem to place beyond reasonable doubt the conclusion that the sun behaves approximately as a uniformly-magnetized

sphere, with the magnetic axis only slightly inclined to the solar axis of rotation and a polarity corresponding to that of the earth." The vertical intensity of the field at the poles was about 25 gauss.

Although this sounds as if the problem were all settled, Hale never seemed entirely satisfied about it in his own mind. The problem continued to occupy him practically up to the time of his death in 1938. It is interesting to examine his remarks, from time to time in the *Annual Report* of the Director. At one time he will refer to the problem of the sun's magnetic field as if the results were conclusive. Then a few years later there will be a note that he has asked some member of the staff to try measuring the plates by a new method.

HALE'S confidence in the reality of the early measures seems to have been badly shaken about 1932, by some results obtained by J. Evershed, a well-known English astronomer who specialized in solar work. In 1909 Evershed had discovered, from small shifts in the position of lines in the penumbra of a sunspot, that gases are flowing outward from the center of the spot—a phenomenon properly known as the "Evershed effect." (One of the best ways to secure enduring fame in science is to discover an effect of some sort). Hale had given Evershed several of the original plates taken in 1913 to measure. Evershed had found small displacements on nine of the plates, but he did not believe they could be due to a magnetic field. He attributed them to Doppler shifts arising from the motion of gas in the solar atmosphere.

Hale now decided to reopen the whole investigation. This time he had measures made on plates taken at the 150-foot tower during the minimum of sunspot activity of 1922-23. Plates for general magnetic field have usually been taken at sunspot minimum, when the surface is not disturbed by the magnetic fields due to spots. These measures were

made by R. M. Langer, a physicist working in Hale's private solar laboratory in Pasadena. Langer used a tipping-plate micrometer as before, but with an automatic device attached to it for registering the settings automatically. He found it necessary to average a large number of measures to smooth out accidental errors, but still the result was about the same: the sun apparently had a magnetic field in 1922-23 of the same sign and intensity as that found in 1913.

Hale also made some measures on plates, taken at the minimum of 1933, which gave negative results. Evidently the measures were not very extensive, as they were never formally written up and published, but only mentioned briefly in the *Annual Report*. But the results—such as they were—led Hale to suggest that possibly the magnetic field of the sun might be variable.

Beginning about 1940 there was a revival of interest in the problem, both in this country and abroad. Previously, observers had concentrated their efforts upon trying to perfect the methods of *measurement*. Now they began to concentrate upon new methods of *observation*. It is impossible to describe all the ingenious schemes which various observers have invented for making the Zeeman effect more conspicuous. Some involve electronic devices by which a weak field can be rendered immediately apparent, when it would have taken hours of measuring by the old method. These devices are so sensitive that a field of 1 or 2 gauss can be measured readily. All observers agree that, if the sun has had a field within the last five years or so, it is too small to be detected with certainty.

THE latest report on this subject was made in December, 1952, by Horace W. Babcock and Harold D. Babcock, working at the Hale Laboratory with an electronic method devised by them. They state that the principal impression derived from a study of their records is that the magnetic pattern of

the sun is remarkably complex. Even when visible spots are few and small, or absent altogether, a rather striking amount of detailed magnetic activity is often revealed. Persistent fields not associated with visible spots may sometimes be identified with regions marked by calcium clouds. Fields of this type have been followed day by day for a week, sharing in the general rotation of the sun, and varying in strength. Abrupt reversals in polarity similar to those occurring in spot groups may appear in these fields.

The Babcocks emphasize that their results are only preliminary, and they caution against attempting to interpret the smaller deflections that rise only a little above the noise level. The magnetic characteristics of the sun are evidently so complex that some of the questions about them cannot be answered until magnetic mapping has been carried for a considerable length of time, probably for one or two sunspot cycles.

By means of the Zeeman effect magnetic fields have been detected in stars far more powerful than those in the sun. The broadening of the lines in the spectrum of a star is complicated by the fact that the lines are also broadened, due to rotation. The strongest magnetic fields have been found in white stars that are rotating the fastest. Whereas a yellow star like the sun rotates at only about a mile a second at its equator, some white stars spin at the rate of a 100 miles a second. Thus, one edge of the star may be receding from us at 100 miles a second, and the opposite edge approaching at 100 miles a second, with the result that the lines in its spectrum are greatly widened or "washed out" due to the Doppler effect. This will not be true for a white star—no matter how fast it is rotating—if its axis happens to be pointed toward us, for then there is no motion either toward or away from the earth.

Observations on white stars with sharp spectrum lines have revealed magnetic fields stronger than those in the

largest sunspots—up to 9000 gauss in the sixth magnitude star, known by its catalogue number of HD 133029. More remarkable still is the fact that in many of these stars the magnetic field varies rapidly. Thus another sixth magnitude star, HD 125248, shows at one time a magnetic field with a positive extreme of 7600 gauss. The field decreases to zero in three days, reaches the negative extreme of 7600 gauss 1.5 days later, then begins to reverse until it reaches the positive extreme again, going through the whole cycle in only nine days.

If a rapidly-rotating white star has a powerful magnetic field that varies in a period of a few days, it is conceivable that a sluggishly-rotating yellow star like the sun might have a weak field that varies in a period of years. If the magnetic field of the sun is variable, we should expect it to be related in some way to the 11-year sunspot cycle. But on the basis of our present observations, it is hard to see what the connection is. Thus the sun seemed to have a magnetic field at the minima of 1913 and 1923, but none at the minima of 1933 and 1944, and none today. It is possible that the field escaped detection at the last two minima owing to lack of observations. But if one appears in 1954 or 1955 it will have no chance of escaping, with the high-powered methods now available.

IT WOULD be nice to endow the sun with even a weak magnetic field, if for no other reason than that the cosmic-ray people badly need one in their business. Readers will remember the bitter dispute that once raged as to whether cosmic rays are high-frequency photons or very energetic charged particles. The question was settled by determining whether the rays are deflected by the earth's magnetic field or not. If the rays consist of photons, then they should be unaffected by our magnetic field. But if they are charged particles, they should be deflected away from the equator but should penetrate more easily at the

poles so that there should be an increase in the intensity of cosmic radiation with latitude. Here we refer, of course, to the *magnetic poles* of the earth, and not the *geographical poles* of rotation.

The measures showed that the intensity of cosmic radiation did increase with latitude, in about the way expected if they are charged particles *up to latitude* 50°. From there on the intensity remained practically constant.

This so-called "shoulder" in the curve was ultimately explained by the deflecting action of the sun's magnetic field. Calculations made by Lemaitre and others showed that a solar magnetic field of 25 gauss such as Hale had found would be sufficient to deflect particles below a certain energy away from the earth's orbit. (It was Lemaitre who originated the "big bang" hypothesis of the origin of the universe). Hence, all particles that are capable of reaching the

earth have already done so at latitude 50°, so that it is impossible for the number to increase any more.

This prediction from theory agreed so well with the astronomical observations that they came to be regarded as one of the strongest arguments in favor of a magnetic field for the sun. The cosmic-ray people went blithely ahead, oblivious of the fact that nobody had been able to find a solar magnetic field of 25 gauss since 1923. Only recently have they begun to awaken to the fact that this field, which fitted in so nicely with their results, apparently evaporated long ago. I have discussed this anomaly with some of them recently, and find that they still don't seem particularly disturbed about it. They tell me in conversation that they could struggle along with only a gauss or two—an amount which the astronomers probably would be willing to grant them.



What Are Their Scientific Names?

A Quiz by Joseph C. Stacey

LISTED below, in jumbled fashion, are 12 types of animals (birds, and so forth) together with the names by which they are known scientifically. Can you match up at least 8 of them correctly for a passing score? 9-10 is good; 11-12 excellent.

- | | |
|-------------|----------------------|
| 1. MAN | (a) felis domestica |
| 2. DOG | (b) suidae |
| 3. HORSE | (c) pisces |
| 4. LION | (d) columbidae |
| 5. TIGER | (e) canis familiaris |
| 6. RAT | (f) felis leo |
| 7. FISH | (g) homo sapiens |
| 8. LEOPARD | (h) aves |
| 9. CAT | (i) mus |
| 10. BIRDS | (j) felis tigris |
| 11. PIGS | (k) equus caballus |
| 12. PIGEONS | (l) felis pardus |

Answers are on page 105, if you must look!



TIME PAWN

I

THE spires were not his own. The colors were not his own. He had a moment of shattering, blinding terror—then calmness. He took a long breath of cold night air and began the job of working out his bearings. He seemed to be on some kind of hillside, overgrown with brambles and vines. He was alive—and he still had his gray-metal case. Experimentally, he tore the vines away and inched cautiously forward. Stars glittered above. Thank God for that. Familiar stars,—

Not familiar.

He closed his eyes and hung on until his senses came trickling back. Then he pushed painfully down the side of the hill and toward the glittering spires that lay perhaps a mile ahead, his case clutched tightly.

The colors shifted and he began to work out, in a dim fashion, the equation of their pattern. By the time he was half way he had it down fairly well. For some reason it made him feel better, a lot better. Here was something he could predict. Get hold of. Above the spires ships swirled and darted like silver fish.

A doctor must stand ready to answer his calls, but

this one came to Parsons out of the future.



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a novel by PHILIP K. DICK

Swarms of them, catching the shifting lights. He was pleased. It was beautiful. Through the abysmal ache of his mind and body, a faint pleasure drifted. Assurance was coming back: he was grateful for small favors.

It wasn't his—but it looked nice. And that was something. So this hadn't changed. Reason, beauty, cold winter air late at night. He quickened his pace

Lorie was gazing at the man with great emotion, as if in the grip of a swelling tide of feeling

Illustrated by VIRGIL FINLAY



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Illustrated by VIRGIL FINLAY

and came onto a highway. He was getting nearer.

He hurried.

As he hurried he let his thoughts wander around aimlessly. Bringing back the last fragments of sound and being, the final bits of a world abruptly gone. Wondering, in a detached, objective way, exactly what had happened.

PARSONS was on his way to work. It was a bright sunny morning. He had paused a moment to wave to his wife before getting into his car.

"Anything you want from town?" he shouted.

Mary stood on the front porch, hands in her pockets. "Nothing I can think of, darling. I'll find you at the Institute if I remember anything."

In the bright sunlight Mary's hair shone a luminous auburn, a flashing cloud of flame. She was small and slender in her green slacks and close-fitting foilite sweater. He waved to her, grabbed one final vision of his pretty wife, their small stucco house, the garden, the flagstone path, the hills rising up in the distance, and then hopped in the car.

He spun off down the road, allowing the car to operate on the New York guide-beam. It was safer, that way. And a lot quicker. He didn't mind having his car operated from a hundred miles off. All the other cars racing along the eight-lane highway were guide operated. Made accidents almost impossible, and meant he could enjoy the countryside.

The countryside was fresh and virginal. Attractive, since President Cantelli had nationalized the soap, tire, and hotel industries. No more display signs to ruin the hills and valleys. Wouldn't be long before all industries were in the hands of the ten-man Economics Planning Board, operating under the Westinghouse Research Schools. Of course, when it came to doctors, that was another thing.

He tapped his gray instrument case

on the seat beside him. Industry was one thing; the professional classes another. Nobody was going to nationalize the doctors, lawyers, virus research workers. During the first part of the century the technocratic and professional classes had gradually gained control of society. Instead of businessmen and politicians it was scientists rationally trained to—

Something picked up the car and hurled it from the road. Parsons screamed in horror as the car spun dizzily onto the shoulder and careened into the brush. *The guide had failed.* That was his last thought. *Interference.* Trees, rocks, came looming up. A shrieking crash of grinding plastic and metal, and his own voice, all mixed together in a chaotic blur of sound and movement. And then the sickening impact that crumpled the car up like a plastic carton.

He was thrown clear—into a rolling void of gray. He remembered spinning slowly, coming to earth like a weightless, drifting feather. Everything was slowed down, a tape track brought almost to a halt. He felt no pain. Nothing at all. An enormous formless mist seemed all around him.

A radiant field. A beam of some kind. The power that had interfered with the guide. He realized that—his last conscious thought. Then darkness descended over him.

He was still gripping his gray instrument case.

AHEAD the highway broadened. Lights flickered around him, geared to his presence. An advancing umbrella of yellow and green dots that showed him the way. The road entered and mixed with an intricate web of other roads, branches that dimmed and faded into the darkness. He could only guess their directions. At the hub of the complex tangible he halted and examined a sign which immediately glowed alive for his benefit. He read the unfamiliar words aloud.

DIR	30c N
ATR	46c N
BAR	100c S
CRP	205c E
EGL	67c N

N, S, and E obviously were North, South and East. But the rest meant nothing. The C was a unit of measurement. That had changed; the mile of his own time was evidently gone. The magnetic pole was still used as a reference point; that was the same.

Cars were moving along the roads that lifted above and beyond him. Drops of glittering light. All colors. Like the spires of the city itself, they shifted hues as they altered space relationship with him.

He gave up on the sign. It told him

Hunger. Almost a sexual hunger. It was clean and bright. Cut against the sky like a diamond. As fresh as a flower, moist and glowing with life.

He began to walk again, buoyed up with new vigor. His spirits were rising—and fast. Excitement and joy flooded over him. What would he find? What kind of world? Whatever it was, he'd be able to place himself. The thought drummed triumphantly in his brain. *I'm a doctor. A hell of a good doctor. If it were anybody else.*

A doctor would always be needed. He could master the language, the social mores. Find a place for himself in the glowing orb of metal and plastic rising up ahead.

THE RIGHT TO LIVE

SPECIALIZATION brings rewards and penalties. In this picture of a far future society, even the right to live is narrowly specialized. Medicine has died, replaced by a ruthless euthanasia to improve the stock. There is no thought of healing—of curing. Yet the supermen of the future have to import a doctor from the past when it becomes vitally necessary to save one life.

This is time travel with a slight difference—the traveler is always an involuntary passenger.

—The Editor

only what he knew already, nothing more. He had gone ahead. A considerable jump. The language, the mensural system, the whole appearance of society had changed.

He hoisted himself from the lowest road up to a hand ramp and from there to the next level. Quickly, he swung up to a third and then a fourth. Now he could see the city with ease.

It was really something. Big and beautiful. It took his breath away. Standing on the ramp in the cold night darkness, the wind rustling around him, the stars overhead, the moving drops of color that were the shifting cars, Parsons was overcome with emotion. The sight of the city made his heart ache.

Parsons gripped his gray-metal case and hurried. He was in love with the city. He wanted to be near it—inside it, as soon as possible.

While he was hurrying breathlessly down the incline of the road, a silent drop of color came smoothly to a halt a few yards ahead of him and slid open its door.

"Hin," a man's voice commanded.

Parsons thought foolishly: but I didn't even have my thumb out.

"Hin!" the voice repeated urgently. The motor started up impatiently.

Parsons got in. The door slammed shut and the drop leaped forward. Parsons was crushed back against the seat by the velocity. The car shot ahead,

passed a number of slower-moving cars, hurtled like a bullet along the smooth road toward the city.

THE man behind the wheel was astonishingly young. Parsons had a moment of surprise—then managed to integrate without showing any reaction. A youth, hardly more than a boy. Eighteen or nineteen. Driving with easy confidence. Obviously master of the car and the situation.

Dark hair, almost black. Coffee-colored skin. Flat, wide cheek bones. Almond eyes that glinted liquid in the reflected light of the city. A prominent nose. Roman? American Indian. And his coffee-colored skin and thick black hair.

The man was an American Indian. But not pure blood. Mixed with something else. The cheek bones suggested Mongolian. The eyes were southern. Negro or Polynesian. The hair clearly Indian. The skin color was more brown than red. A polyglot of everything. He wore a two-piece robe, dark red, with an embroidered herald on his chest. A stylized eagle.

Eagle. EGL. And the others. DIR was deer. BAR was bear. The rest he couldn't guess. What did it mean? He leaned over to speak, but the youth cut him off.

"*Whur venis a tardus?*" he demanded.

Parsons was floored. The language was unfamiliar—but not alien. It had a baffling ring, something almost understood, but not quite.

"What?" he asked.

The youth qualified his question. "*Ye kleidis novae en sagis novate. Whur iccidi hist?*"

He was beginning to get the drift. A strange mix of languages, based on Latin. Latin and something Indo-European, probably Germanic. The man wanted to know why he was out so late and why he was dressed so strangely. And why he spoke as he did. Parsons framed some Latin—then forgot it, as the youth said calmly and unmistakably:

"*Yer vita hin periculum hist.*"

"Why?" Parsons demanded, chilled to the core. "I haven't done anything."

The youth said nothing. They were entering the city. A broad span lifted them over a moat. More and more cars were visible. People on foot. Parsons glimpsed crowds, great masses moving along spidery ramps, entering and leaving the spires, pushing along sidewalks. They were all young. Like the youth beside him, they were coffee-skinned, black-haired, large luminous eyes and flat cheek bones. An endless variety of robe-colors. Emblems on each. Animal, fish, bird heralds.

Why? Society organized by totem tribes? Different races? They all were physically alike. Only the robe colors and heralds differed. All wore their hair long, braided and tied in back. The men were considerably larger than the women. Stern noses and chins. The women hurried along laughing and chattering, bright-eyed, red lipped. Incredibly smooth skin. But so young—almost children. Merry, laughing girls and boys.

The car slid to a halt. The youth snapped off the motor and opened the door. For a moment he sat deep in thought. Then he spoke a few clear sentences.

Persons listened. At first he didn't follow. The youth repeated them. Then Parsons, by a violent mental effort, threw them over into his own semantic system.

"You shouldn't be outside," the youth had said, firmly and quietly. "Not until you have different clothing and have mastered more of the customs. It isn't safe. But if you do what I say, danger can be averted."

Parsons phrased a question carefully. In as close an approximation as possible of the youth's Latin and Anglo-Saxon, he asked: "Do you know who I am?"

"Ne."

"Do you know why I'm here?"

The answer was *ne*. The youth abruptly slid out onto the sidewalk and motioned Parsons after him. Awkward-

ly lugging his instrument case, Parsons followed, across the pavement and into a spired building.

A FEW people were lounging in the lobby. When they saw Parsons they froze with surprise. All eyes were on him as the youth led him through the lobby and into an ascent lift.

They rose an indefinite distance. Parsons followed him obediently out of the lift and down a luxurious hall. He obeyed unquestioningly. There was nothing else he could do. He had seen the expressions on the faces of the people in the lobby. A mixture of horror and disgust. But why disgust? It shook his confidence roughly—and made him follow.

They came to a door. The youth raised his hand and the door faded. A room where four or five people sat, lay ahead. The people looked quickly up, conversation abruptly broken off. Parsons felt a momentary stab of panic. Again the mixture of horror and disgust. A woman scrambled back. Two men arose. Startled exclamations.

Behind him the door locked shut.

II

THEY were all young. Almost children. A boy no older than ten. A girl in her early teens, virginal unformed body under her robes. The oldest of them was the youth who had brought him; and he was a mere boy. Various robe colors and heralds. But physically all alike.

"Who are you?" a man demanded in the dialect.

"Where did you get him, Wade?" a woman asked. "Good Lord, what'll Loris say?"

"Is he sick?" the little girl piped. "What's wrong with him? Why does he look that way?"

All of them had withdrawn in a hostile, remote ring. It was not curiosity on their handsome, coffee-colored faces. It was outright loathing.

"Make him leave!" the boy shrilled

in a lilting, musical voice. "He's sick!"

"Be quiet," the youth named Wade ordered sharply. "All of you get out. And don't say anything."

They got up and moved slowly toward a side door, eyes still on Parsons. One by one they left the room, murmuring and talking in low tones. Faces unified in a single expression of fascinated revulsion. As if he were some kind of refuse.

"What's the matter with them?" Parsons demanded.

"Pay no attention," Wade said indifferently. "When you're washed and have clean clothing you'll be all right." He examined Parsons closely. "Your skin. Why is it white?"

"We're all that color."

"Where?"

"Back in my own time."

"You're from the past?" There was no surprise, no astonishment. Mere desire for accurate identification. "What era?"

"Twenty-first century. I was picked up by some kind of force-field. I don't know why. Maybe I'll find out."

Wade computed. "That was seven hundred years ago. Before the War?"

"Before some wars, I suppose. After some. What's the matter with those people?"

"It'll take a while for you to become accustomed to our standards. Assuming you can at all." Wade had gone to the window and was gazing thoughtfully out at the city. "It was lucky for you I came along. One chance in a thousand."

"Why you?" Parsons was getting mad. "Are you the only one with empathy? To the others I'm just a freak, some kind of—"

"Seven hundred years is a long time. Much has changed. There was the War. Society as you knew it came to an end. We built up from the bottom. I don't know if you can adjust to this."

Something in Wade's voice made Parsons forget his anger and the shadow of fear. "What do you mean?"

"We have rigid standards. Maybe you can fit in—maybe not. Unfortunately, there's no middle ground."

"In other words, either I'm accepted as one of you, or I'm no part of the human race."

"That's about it."

Shakily, Parsons got out a cigarette from his case. He struck the strike end and puffed rapidly. "I see the emblem of the eagle on your robe. Eagle, Otter, Deer, Bear, Wolf. What are you, divided into tribes? Back to some sort of a tribal basis?" He was really sweating, now. He was familiar with the psychology of tribes. The in-group concept. The exclusive orientation. "I'm beginning to see the set-up. A number of tribes with totem-identification. Yours is the eagle. You exalt the eagle qualities? Ruthlessness and quickness?"

"Not exactly." Wade moved away from the window. "All tribes are unified. The race has a common outlook as a whole. We know nothing about eagles. Only a word—not characteristics. Our tribal names came out of the Age of Darkness that followed the War."

FROM the hall a shape entered. A woman. She stopped at the sight of Parsons. "Oh!" she gasped, dark eyes wide with astonishment. "Who—"

Wade greeted her. "Come in. Icafa, this is—"

"Parsons. Doctor James Parsons."

The woman nodded nervously. She was perhaps twenty. Slender and dark-haired, with an armload of brightly-colored packages. In a gray robe, with the herald of a wolf between her small pointed breasts. She advanced breathlessly toward Parsons. "Who are you? Where are you from?"

"Parsons came here unintentionally," Wade said. "From the past. Before the War."

"Really?" There was awe in her large black eyes. "Why is your skin chalk-colored?"

"In my time we were divided into white, yellow, brown, black, all varieties

of sub-races within the species. Apparently there was a mix sometime after the War."

Icara's finely-shaped nose wrinkled. "Separate sub-races? How awful. What are you doing here? Has Loris been notified? Where are you going to stay?"

"I don't know where I'm going to stay. It's not my fault I'm here. Something—*somebody* brought me here."

Icara walked all around him, examining him from every side. "Wade, I don't see—I mean, it's going to be such a problem. The Soul Cube will be thrown off. You'll be in trouble with the Government. How can he be fitted with the Fountain? All sorts of things. He's so very different!"

"Is that bad?" Parsons demanded.

Icara blinked. "Bad? Why, of course it's bad. Isn't it? If you're different then you don't have any place. You don't—"

"*Belong*," Parsons finished harshly. "Is that it?"

"But you can learn!" Icara exclaimed. "Wade will give you the right clothing. You can learn to speak the language without an accent. But your skin. I don't see how—"

"We can use dyes," Wade broke in impatiently. "The real problem is orientation. His period was lacking in concepts impressed on us at birth. Basic concepts we get as babies. He can't possibly assimilate enough at this late date." A thought struck him. "How old are you?"

Parsons was taken aback. "Thirty-two."

Wade and Icara exchanged glances. "Oh dear," Icara said. She changed the subject quickly. "What do you have in that gray box?"

"My instruments."

"And what about the Lists?" Wade said, half to himself. "The Government won't like it. He can't be fitted into any of the tribes. He'll throw the count off."

Parsons was opening his instrument case. "Look," he said grimly. "I don't give a damn about your tribes. You see these instruments? They're the best surgical tools developed in twenty-six

centuries. I don't know how good or how extensive your own medical work is, but I can hold my own in any culture, past or present. Maybe I'll never know. But I can be of value anywhere, with my kind of knowledge and skill. I know *that*—if nothing else. My medical knowledge will always find me a place. In this society and anywhere else!"

Icara and Wade were blank. "Medical knowledge?" Icara faltered. "What's that?"

Parsons was appalled. "I'm a physician."

"You're a—" Icara searched for the word. "What was it I read in the history tape? Was it *alchemist*? No, that's earlier. Sorcerer? Is a doctor a sorcerer? Does a doctor work with magic and supraterrrestrial forces?"

AT THE DOOR, a man appeared. In a blue robe, with a dog emblem on his chest. "Icara. Did you get them?"

Icara nodded. "Of course."

"Bring them here. We're all waiting."

"Later. In a minute." Icara's attention was on Parsons. "Your period specialized, didn't it? You have a specific vocation you've been trained for. We don't have that. Knowledge isn't learned. It's impressed on us at birth. There's no time lag and no division. Each of us possesses the full knowledge of our society. There's no separation by trade or vocation, except in actual activity."

The man had come into the room. "Icara, come here. Get away from that—" He used a word Parsons couldn't catch. But he got the tone.

"In a minute," Icara repeated. "It might be that the impression would work, even at your age. If not, I don't see how you could—"

The blue-robed man grabbed her by the shoulder. He wasn't a man, really. Like all the others he was a smooth-faced youth, probably not over twenty. Black, thick hair tied against his neck. Liquid eyes. Right now those eyes were blazing. "I told you to come here."

"Let go of me!" Icara dropped her packages, her coffee-colored cheeks flushed. She tore his hand away. "I'll come when I'm ready."

"Get out of here, Kem," Wade ordered. "I told you to wait in the other room."

Kem's face was ugly. "And I told her to come." He grabbed Icara by the neck, and with one quick shove threw her against a table of ornaments. Icara and the table crashed to the floor.

Wade swung. Kem ducked and kicked Wade in the groin. Wade went down gasping with pain. Kem strode over and dragged Icara to her feet. She struggled futilely, crying and slashing at him with her nails. Broken bits of colored glass lay everywhere. Blood ran down Kem's cheeks as the girl's nails dug into the smooth flesh. Kem grunted, jerked her to her feet, and drew back his fist.

The others were pouring back into the room. Shouting and milling excitedly. Parsons stepped in. He smashed Kem with one hard blow directly on the jaw. He was tired—but he still had plenty of arm muscle. Blood and broken teeth gushed from Kem's mouth. He staggered back, clutching—not at his face—but at his belt.

PARSONS saw it coming. Bright and spinning. Like an egg beater, flashing across the room. He threw himself down—but the thing wasn't aimed at him. Too late he saw where it was heading.

The flashing vanes caught Icara as she was getting unsteadily to her feet. It was ingenious. It started where it struck, a little above her stomach, and worked its way up. Icara screamed and tried to push it away from her. The thing crawled up her body, a blur of whirring blades. It slashed into her breasts like a lawnmower. It climbed her neck, crossed her face, passed over her eyes and around the side of her head. Icara beat at it and screamed helplessly, wildly. Her shrieks echoed through the room. She tottered against

the wall, slipped, fell, lay rolling and screaming.

Somebody kicked the thing from her. A foot came down on it and the demoniac blades crunched into immobility.

Icara lay face down in a growing pool of blood, twisting and moaning. Everyone was running and shouting. The hall door faded and people spilled out into the corridor.

"Get help!"

"Get the building. Euthanor!"

"Her own. She has her own Euthanor."

"No time. Get the building Euthanor. On the ground level."

Parsons dragged his instrument case over. He ignored Kem; two men had pinned him down on the floor and were systematically beating him. He bent over the dying girl. The blades of the thing had cut two inches deep. Her breasts had been virtually severed. He tore the remains of her robe back, soggy with blood and ribboned flesh. Had the blades reached her heart?

He gave her a quick shot of morphenol. Her moans faded. She sagged into unconsciousness and her slashed body relaxed. Her heart was still beating, slowly, faintly. The rib cage had been penetrated on one side. Bloody specks bubbled from her half-severed windpipe.

He worked fast, hands flying. For the damaged heart he plugged a Dixon Pump into her chest, driving the prongs in expertly. The robot unit began to throb at once. Then he turned his attention to her throat.

Wade had come to. He stood unsteadily over Parsons, with several others. "Can you help her?" he demanded shakily.

Parsons nodded. "It's my job."

He sprayed art-derm tissue over her gashed windpipe. Her vascular and respiratory systems were the first thing. He turned the little art-derm nozzle on her exposed ribs. One lung had collapsed. The other seemed intact. Once she was breathing again, and her blood circulating—

"Are you sure you know what you're doing?" the little boy demanded. His eyes were bulging out of his head at the sight of the ruined body lying in its own blood. "Maybe we better get the regular Euthanor."

The hell with him, Parsons thought grimly. "I'm doing all right," he muttered aloud. His fingers flew with a life of their own. Twisting, cutting, spraying, breaking open plastic tubes of tissue graft and fitting them into place.

He couldn't do much about the face. One eye was gone. She probably wouldn't talk again; at least, not very well. But she'd live. The furrow from her stomach to her temple had been covered with a thin coating of air-proof plastic. No infection, if he had got every exposed place. The Dixon pump beat regularly. Handy little unit.

Yes, he knew what he was doing. The girl would live. In another half minute her life would have ebbed out of her throat and chest—and nothing would have saved her. In spite of his horror, a kind of triumph licked through his brain.

His skill, his knowledge, had saved her.

A SHAPE loomed up at the door. A gray-haired handsome man with something under his arm. The Euthanor. Parsons grinned coldly. "It's all over," he said, standing up. "I took care of her. You're a little late."

"I was out of the building," the Euthanor said. He took in the sight of the girl and his eyebrows rose. "You did this?"

What was left of Kem had been tossed in the corner. It stirred feebly. "Him next, I suppose," Parsons said. "He's not worth it, but that's none of my business. Let the law take care of that end. That's not my department."

He examined Kem. His arms, legs, nose, most of the smaller bones in his body, had been carefully broken. He wasn't in serious shape—but he was a hell of a mess.

Parsons began to work, aware of the

Euthanor still standing uncertainly at the door. They were all watching him work, watching his flying fingers. His skillful hands that moved in a blur of speed. Healing hands. The watchers were awed. His obvious assurance, his competence, had made even the Euthanor silent. On the man's face a begrudging, admiring expression was forming. Mixed with vague doubt.

"I can't follow your work," the Euthanor admitted. "I've never seen anything like it." He was overcome with curiosity. "Who are you? Where are you from? How did you learn to work like that?"

Parsons didn't answer. He was enjoying the fierce thrill of his craft, the power of his hands, strength flowing through his fingers. Faster and faster he worked.

Icara was beginning to regain consciousness. She gave a faint cry and moved her arms.

There was a moment of stunned silence. "What does this mean?" the Euthanor demanded hoarsely.

"She'll live," Parsons answered irritably. What the hell did they expect—a miracle? "Better get her into a bed. I can't do anything about her eye. But there's no longer any danger."

"No longer any danger?" Wade repeated.

"That's right," Parsons said slowly. What was the matter with them? "She'll live. She'll recover. Understand?"

Wade was trembling violently. "I understand. You god damn insane pervert! You—maniac!"

And then they all closed in on Parsons. All robe-colors. All emblems. A single, grim mass.

In the dimly-lit room the two shapes watched the glowing procession of words intently, avidly, leaning forward in their chairs, powerful bodies taut.

"Too late!" the strong-faced man cursed bitterly. "Everything was out of phase. No accurate junction with the dredge. And now he's trapped in an inter-tribal area."

"Eagle," the other whispered, lips curling with disgust. "Dog. Eagle. What's the matter with the emergency team? Why aren't they there? They've had fifteen minutes! The first flash was sent out as soon as—"

"It takes time." The strong-faced man paced restlessly back and forth, feet lost in the thick carpets that covered the floor. "If only we could come out in the open."

"They won't get there in time." The seated figure struck out savagely and the flow of illuminated words faded. "By the time they get there he'll be dead—or worse. So far we've completely failed, Helmar. It's gone wrong."

III

NOISE. Lights and movement around him.

Parsons opened his eyes. A shattering blaze of white drove remorsefully down on him from all sides. He winced in agony. Through an aching haze he made out dim shapes moving in the light. Men. Equipment. A faint hum of machinery, steady and unchanging.

"*Namen*," a voice murmured.

Another voice answered. Not his own. Someone else giving the answer. "James Parsons."

"*Olt?*"

"Thirty-two."

The voices blurred off. He was lying down—strapped or weighted. Men were talking off in the distance. Talking about him. Facts, figures. One asking, another answering. Grouped around a table, some sitting, some standing. Reading their answers from charts. He was in a laboratory. Or a clinic.

He had been beaten up. Maybe this was a hospital. But they didn't have hospitals. Not in this insane world where people happily put each other to death, hired Euthanors instead of doctors. Euthanor. Euthanasia.

The men had noticed he was regaining consciousness. Shapes gathered around him. Black-haired, coffee-col-

ored skins. The smooth skinned, bright-eyed youths. All of these were in plain white robes. Children—but they didn't have to be trained. What had the girl said? Knowledge was fused into the flexible infant brain at birth. These children probably had ten times the knowledge he had, from years of painful step-by-step learning.

"Are you able to understand?" one asked him in the jargon, part Latin, part Anglo-Saxon.

"Yes."

"We came just in time. Another minute and they would have put an end to you."

PARSONS focused with great effort. Faces swam into view. One boy was addressing him. He, like everybody else, was too young. Not over thirty. He had the bored, indifferent expression of an old man. He sat perched on the edge of a table, watching Parsons critically.

"Can you get up?" he asked.

Parsons struggled to sit up. His body shrieked with agony and he settled back. For a moment blackness swarmed around him. He grunted and bit hard. Gradually, reluctantly, the blackness receded. Again the ring of faces swam into view.

His clothing was gone. He had on a two-piece robe like the others, a nondescript white—without emblem. The same as those around him. Sandals. He touched his cheek. Cuts, bruises. His ribs felt cracked in several places. The whole gang had jumped him. All of them, including Wade.

"Where am I?" he demanded.

"This is neutral ground," the bored-faced youth answered. "They can't come here."

"They?"

"The tribes. This is Government-operated."

"What is this? A hospital? But you don't have hospitals. A lab of some kind?" His mind was racing. Maybe he had found *them*—the ones who had brought him, sucked him into the fu-

ture. Torn him from his own time. Maybe he had finally made contact. "For God's sake, where am I and who are all of you?"

"This is the Fountain, the organization and equipment which maintains the Soul Cube. I'm Stenog, Director of the Fountain, in charge of the Cube. Responsible to the Government, not to the tribes." He leaned toward Parsons. "You're the man from the past?"

"Yes."

They were all listening intently. "You were suddenly brought here? Picked up by a time-dredge?"

"A force field of some kind." He searched their faces wildly. "Are you—"

"Nobody else came with you? You're the only one? Is there anybody with you?" Stenog's youthful face was hard. "Do you know who brought you here? Why you were picked up?"

Parsons sagged. "No." He shook his head wearily. "I thought maybe—you knew. I don't. There's no place for me in this insane society. I don't know why I'm here or who brought me."

Stenog referred to his notes. A strange look slid over his smooth face. "In your own period you're a—*doctor*?"

"That's right."

An uneasy murmur moved through the room. Stenog hesitated, then continued: "You saved that girl's life?"

"Yes." Parsons struggled up. "Of course I saved her life! She was dying—that sadist cut her to bits. What should I have done, just stood there while she bled to death?"

STENOG drew back a little and licked his lips nervously. The muffled murmur still moved around the ring, from Stenog down the line and all the way back. Stenog took a deep breath and plunged grimly on. "That was a crime. A major crime. You will not be allowed to return to tribal ground. You'll be sent from here to the prison colony on Mars. From now on your contact will be with robot guards exclusively."

Another figure intervened. "Can I question him in the time remaining? There are a few things that didn't come out in the psych-tap."

"Of course, Carter." Stenog retired.

This man was older. Heavier. There was a faint trace of gray in his black hair. His neck was a trifle puffy. He was not as dark as the others. There was a cold, unblinking hardness in his gray eyes as he approached Parsons.

"Parsons," he grated. "I'm interested in you and your world. In a few minutes you'll be taken from here to the relay rocket. In the meanwhile, you are willing to answer questions?"

Parsons nodded. A realization of what he had lost—Mary, his home—sickened him. He was too numb to care what happened now.

"I have read about your period in the history tapes," Carter continued. "You are a *doctor*. I understand the meaning of the term, the function you performed. But I cannot grasp the ideology behind it. *Why?*" His hard face became alive with emotion. "What was the purpose of it? That girl, Icara. She was dying. Yet, you made skilful and deliberate alterations in her system for the purpose of keeping her alive!"

Parsons answered with an effort. "That's right."

They were all murmuring. "In your culture that would have had a positive value?" Carter persisted. "Such an act would have been sanctioned?"

"Your profession was honored?" Stenog interrupted, unable to comprehend. "There was a valued social role for a person of your type?" He shook his head in bewilderment. "I don't understand."

The hard-faced Carter was also having difficulty. "I find it impossible to believe a *whole society* could have been oriented around such a drive. Surely only a small segment of your culture approved such behavior."

Parsons heard them, but their words made no sense. Everything was out of focus. Distorted. As if turned inside

out by a warped mirror. "Healing was respected," he managed to say. "But you people seem to think it's somehow wrong."

A furious rustle leaped through the circle of listeners. "*Wrong!*" Carter snapped. "It's insane! Don't you see what would happen if *everybody* were healed—all the sick and injured? The old?"

"No wonder his world collapsed," a strong-faced girl said, eyes wide with horror. "It's amazing it stood so long. Based on such a perverted system of values."

"It demonstrates," Stenog said thoughtfully, "the almost infinite variety of cultural formations. That a whole society could exist oriented around such drives seems to us beyond belief. But from our historical reconstruction we know such a thing actually went on. This man here is not an escaped lunatic. In his own world he was a valued person. His profession had social sanction and prestige."

"But they didn't realize the consequences," the girl pointed out.

"They continued to function a considerable time, however. The War was almost a century later. It took time for the toxic effects to rise and become evident."

"I'd like to ask him something," the girl said grimly. "Parsons, did you heal *anyone* who was sick?"

"Yes."

"Anyone at all?" She was incredulous. "The aged? You kept the aged alive as long as possible?"

"Yes."

"And the deformed?"

"We healed anybody who needed healing."

The girl shook her head. "Intellectually, I can accept it. But not emotionally."

CARTER edged forward. "Parsons! Let me ask you this." A cunning gleam slid over his cold features. "I know a related fact. Your science was

also devoted to keeping new life from appearing. You had—contraceptives. Chemical and mechanical agents preventing zygote formation within the oviduct."

Parsons started to answer. "We—"

"*Rassmolt!*" the girl snarled, livid with fury.

Parsons blinked. What did she mean? He couldn't convert it into his own semantic system.

"Do you remember the average age of your population?" Stenog asked.

"No," Parsons muttered. "About forty, I think."

Stenog tightened up. "Forty! Our average age is—fifteen."

It meant nothing to Parsons. Except there were no old people. But he had already seen that. "You consider that something to be proud of?" he asked wonderingly.

A roar burst from the circle around him. A spontaneous exclamation of rage. "Take him!" Stenog lashed. A group of armed men approached quickly. "Load him on the rocket. We're through with him."

Certer stopped them a moment. "All the legal details have been taken care of?"

"Of course." Stenog waved a sheaf of papers. "We have the girl's complaint. Filed with us just before she died."

Parsons reacted.

"*Died!* But—"

"She died half an hour ago."

Parsons was dumbfounded. "But she was recovering! She was getting well."

Stenog laughed. "This paper is her official complaint. Against you." He pushed the paper in Parsons' face. "Charging you with deliberately obstructing the natural process of *seel-motus*. As soon as she had completed this form she called her family Euthanor and underwent the Final Rite."

"You mean she—"

"It was her pleasure. By her own will she undid the harm you had attempted. She is dead."

"HIS will have to be brief," Stenog said. "We can't stay here long. The rocket is automatically launched and follows a prescribed schedule."

The chamber was huge. Parsons was staggered by the endless maze of corridors and passages that stretched off in all directions into the great globe that was the nerve-center of the Government. This building was the Fountain, the control mechanism by which the Government maintained the planet and regulated the tribes.

One side of the chamber was the wall of a gleaming cube. A vast tank that exceeded the dimensions of the chamber itself. With a shock, Parsons realized he was seeing only a portion of the cube, a single section. The cube lay mostly below the surface, buried deep in the earth.

The cube was alive. A constant undercurrent pulsed through it. Along the visible portions, countless white-clad technicians hurried back and forth. The whole chamber was one vast hive of activity. Equipment, machines, meters, power cables, at work everywhere. Armed guards posted by all the passages. Robot freight elevators moving tons of supplies.

This was the core of their world. This cube, this vast metal square set in the heart of the Fountain.

Stenog pointed to a row of viewslots along the exposed portions of the cube, directly above the entrance locks. "We're being watched from inside. The two of us as we stand herê. I'm the Director of the entire Fountain system, but every minute I'm down here they have their beams trained on me." He smiled humorlessly. "If I lost my head and began running toward the tube, they'd blast me out of existence. The exposed side of the cube is a wall of energy tubes. If the emergency order were given, the cube would be insulated instantly and this tangent area reduced to radioactive ash. There's no approach

to the cube not covered."

"What's in it?" Parsons asked.

"Arrested zygotes. Frozen in cold-pack. By the hundred billion. Our total seed. Our horde. The *race* is in there. All of us living are a minute fraction of what's contained in there—the future generations to come."

"How is it regulated?"

"Two billion eight hundred million men and women walk the face of the earth. That number is a constant. Each death automatically starts a new zygote from cold-pack along its regular developmental path. For each death there is an instantaneous new life. The two are interwoven."

"Where do the zygotes come from?"

"Contributed according to a specific pattern. Each year we have Lists. Contest examinations between the tribes. Tests that cover all phases of ability and prowess: physical fitness, mental faculties, psycho-biological skills, powers of cognition, Gestalting and intuitive functioning at every level and of every description and orientation. From the most abstract to the object correlates, the manual skills."

Parsons grunted in understanding.

"The contribution of gametes is proportional to the test-ratings of each tribe."

"That's right. In the last Lists the Wolf Tribe gained sixty victories out of two hundred. Therefore it contributed thirty per cent of the zygotes for the next period, more than the three next highest tribes. As many gametes as possible are taken from the actual high-scoring men and women. The zygotes are always formed here, of course. Unauthorized zygote formation is illegal—and impossible. All males are sterilized at birth. The Fountain controls all male games extant. A fixed supply, to which the best female gametes are contributed, by the high-scoring women."

"In other words, your future generations are obtained from only the most outstanding persons of the race."

"Extremely talented persons have made substantial contributions over

many years. Once a gifted individual is located, all efforts are made to obtain his or her total supply of gametes. The Mother Superior of the Wolf Tribe, for example. None of her gametes are lost. Each is removed as it is formed and immediately impregnated at the Fountain. inferior gametes, the seed of low-scorers, are ignored and allowed to die."

Parsons' mind was spinning. "Then your stock is always improving."

Stenog showed surprise. "Of course!"

"And the girl, Icara. She wanted to die—knowing she was maimed and disfigured. She would have had to compete in the Lists that way."

"She would have been a negative factor. She was what we call *substandard*. Her tribe would have been pulled down by her entry. But as soon as she was dead, a new zygote was released. A superior zygote, from a later stock than her own. And at the same time, a nine-month embryo was brought out and severed from the Soul Cube. A Wolf died. Therefore this new baby will wear the emblem of the Wolf Tribe. It will take Icara's place."

Parsons nodded slowly. "It'll compete in her place. A healthy individual—with no disfigurement or no handicaps." He was beginning to see the ramifications. "She died, knowing that."

"You understand?" Stenog glanced abruptly at his wristwatch. "The rocket." He signaled to the guards and they moved around Parsons. "Sorry, but we have to go back up. I wish I could show you more, but it's out of my hands. I didn't write the penal law. I only execute it."

THE sunlight was hot and shimmering in their faces, as they emerged from the Fountain and out onto the roof ramp. The afternoon sky was blue and cloudless. The city lay stretched out on all sides, spires and webs and gleaming spans. People swarmed everywhere, bright colorful dots below. Laughing, chattering crowds of young men and women, clean-cut faces, coffee-colored

skin. Bright almond eyes. Strong noses and chins. A handsome race. Noble, imposing men. Full-breasted women with warm lips and black hair.

A fine race. Laughing, hurrying excitedly through their magnificent city. And it *was* magnificent. Below the roof ramp a man and woman passed along a narrow strand of metal connecting two spires. Neither of them was over twenty. Holding hands as they rushed along, eyes bright, talking and smiling at each other. Parsons caught a glimpse of the girl's small face, slender arms, tiny feet in their sandals. A rich face, full of life and happiness. 'And health.

Yet the thought drummed in his brain, refusing to go away. *This was a society built on death.* Death was a part of their lives. It didn't make sense. Individuals died and no one was perturbed—not even the victims. They died happily, gladly. It was wrong. It was against nature. A man was supposed to defend his life instinctively. Place it before everything else. This society was a denial of man's basic needs and drives.

"But they're happy!" Parsons said out loud.

"Why not?" Stenog inquired.

Parsons struggled to find words. "They live with death. You—invite death. When someone dies you're glad!"

"Of course." Stenog was astonished. "Death is perfectly natural. It's part of the cycle of existence—as much a part as birth. Everything that lives must die. You saw the Soul Cube. For us, death is a further movement of *seelmo-tus*, the forward development of the race. Human evolution. Each death has meaning. A man's death is as significant as his life. Death has been integrated into our society. It plays a vital part in our lives."

Parsons shook his head mutely. He couldn't understand. His whole existence had been geared to a denial of individual death. Death was pushed back, kept off as long as possible. Death of

a person meant suffering for all his family and friends. It was suppressed, taboo. And remembering Mary, he thought how much there was to live for—if he could ever get back. The system he saw was not a part of life as he knew it, but its negation. The only explanation of death in his world was—

No explanation. A man simply lived out his life and tried to pretend he wouldn't die.

Yet, in some baffling way, these people had worked death into their daily living. Instead of being the negation of life it was a valuable part—the culmination of existence for an individual, the moment at which he made his greatest contribution. When a person got sick, or was injured, or started to get old, the Euthanor was called and the person quietly destroyed. No one cried. No one sorrowed. An individual had been reabsorbed into the race—advanced his species, his tribe, up one more notch.

STENOG pointed to a shrub growing by the edge of the rocket stage. "See that bush?" He lifted up a heavy stalk. "What do you notice growing?"

"A bud."

"Here is a bud." Stenog lifted another stalk. "Here is a blooming flower. And over here—a dying flower. Past its bloom." He took a sharp knife from his belt and with one swift, clean swipe he severed the dying flower from the bush and dropped it over the ramp edge. "You saw three things: the bud, which is the life to come. The blossom, the life going on *now*. And the dead flower—which I cut off, so that new buds could form on the plant."

Parsons was deep in thought. "But someplace, somewhere in this world, there's somebody who doesn't think like this. That must be why I was brought here. Sooner or later—"

With a crashing roar the rocket began to test its launching jets. Parsons' words were drowned out.

"Ready, sir," a technician signaled to Stenog.

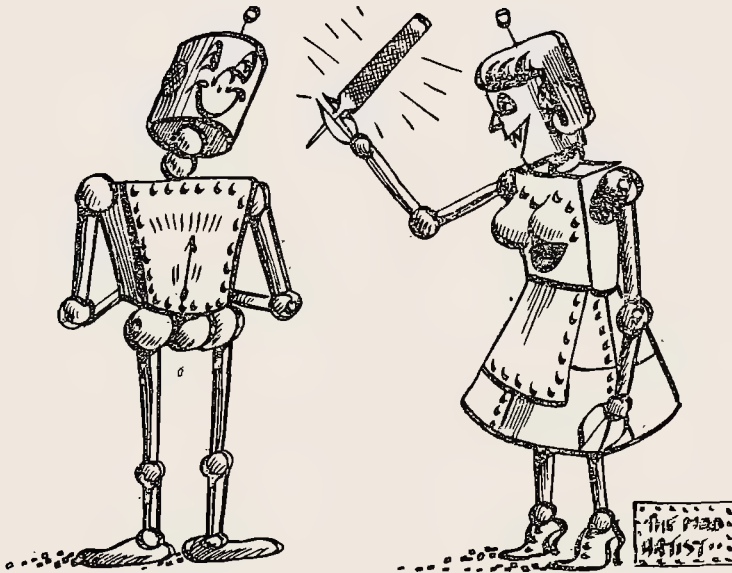
Stenog moved toward the rocket, Parsons beside him. "There's one thing I wanted to ask you. Certer said your society used gamete-destroying agents. I didn't believe it, at the time. Is there any truth in it?" He searched Parsons's face. "Surely it isn't possible your society deliberately practiced *rassmort*!"

Parsons started to answer. But what could he say? He could see the flickering horror in Stenog's eyes, fear he would hear confirmation, not denial.

the spires and fragile webs of the city—and then the hatch locked shut.

The rocket throbbed and shuddered impatiently under him. A nervous pulse, eager to go. Held back by powerful brakes—already being removed by the control tower.

Parsons sank wearily down on the metal bench provided, and rested his arms against the safety bars. There was no control board. No viewscreen. Only the bare metal walls.



"Thank you, dear, it's just what I've always wanted, a toothbrush!"

How could he explain?

He couldn't. It wasn't possible to explain his world to this man. Not in the brief seconds left.

"I have nothing to say." Parsons turned toward the rocket lift. "Let's get it over with."

HE WAS led into a single compartment, a four-sided cell of bleak metal. A brief glimpse of Director Stenog, the great globe that was the Fountain,

The take-off threw him crashing. The safety arms slid away from him and he sprawled onto the floor. Waves of shock rolled over him.

A second convulsion came, greater than the first. Dimly, he realized the rocket was gaining escape velocity. The shock waves dinned to a violent inferno of lapping force. Blackness began to drift into his mind. He was losing consciousness. The blackness dissolved into the shock waves and eased the crushing

load of the acceleration.

When he next became aware of things, the jets had become silent.

The rocket was coasting. There was no sound, no sense of motion. Nothing. Parsons got unsteadily to his feet. How much time had passed? The rocket had apparently reached maximum velocity. Broken free of Earth's pull and entered free space. The shuddering, the roar, the constant lap of force, were gone.

Only a distant whistling. The air stream around the rocket.

Air. He wasn't in free space. The rocket hadn't left Earth. He was still—

The rocket hit with a bursting roar. There was no warning, no time even to throw up his hands. He saw the bleak metal wall come up at him—and then an infinity of flashing fragments. The wall burst around him and his being dissolved in a single shriek of agony.

As consciousness died, one final thought remained. Burned deep in his fading mind.

The rocket hadn't left Earth. Only a short time had passed—not even long enough to escape Earth's atmosphere. The rocket had never reached Mars and the robot-operated prison colony.

Something had gone wrong.

V

PARSON'S senses seeped slowly back. Gradually, his mind reformed itself. It took a long time. How long, he didn't know. Seconds, hours, centuries. There was no way to tell.

He opened his eyes.

He was in a luxurious apartment. Satin covers on the wide, incredibly soft bed. White pillows behind his head. Lush wine-colored drapes. Thick multi-colored carpet from wall to wall. Lamps. Furniture. Bric-a-brac.

A woman's apartment.

Through a half-opened closet door he made out the dim shapes of a woman's clothing. Robes and gowns. Slippers. Black-mesh slips embroidered with gold as fine as spider web. Furs. Capes. Silk

underclothing.

While he was wondering vaguely where he was and how he had got there, the woman appeared at the door.

She was beautiful. Even beyond what he had already seen in this world of youth and robust bodies. This woman was *different*. Parsons pulled himself up and concentrated his mind.

She was older. Perhaps thirty-five. A powerfully-built creature, with cascades of black hair, a heavy torrent all the way down her shoulders to her waist. Finely-chiseled nose and chin. Deep red lips. Her large brown eyes were fixed intently on him as she came into the room, rustling silently toward him, her lithe body rippling the faintly-luminous robes that clung to her breasts, her loins, her long legs.

On the front of her robe, lifted high by her full breasts, was a herald, an intricate design woven into the rich fabric, that rose and fell with the motion of her breathing. A wolf's head.

"You're—Loris," Parsons muttered.

"That's right," the woman answered. Her voice was low and husky. A deep throb. "How do you feel?"

"Better. What happened?"

"Our beam wasn't perfectly phased. The rocket was only partially under our control. It crash-landed a few miles from here."

Parsons digested the information. Loris moved around the room, still watching him as she straightened things here and there. He could see why she had become the Mother Superior of her tribe. Why her contribution to the Soul Cube was of supreme importance. He could see it in her eyes, in the firm lines of her body, her mouth, her wide forehead.

She was the first real adult he had seen. Either in this world or in his own. She was fully mature, mentally as well as physically. Her body was ripe, perfectly formed. Her breasts, her thighs, her throat and shoulders—utterly complete. There was nothing more nature could add. She was the most im-

pressive living creature he had ever seen.

This was what they were trying to reach. This was what they would become, his own race, in some future time. For several years, her seed had swelled and enriched the racial stock, strengthening the already potent generations to come. He could imagine what the race would be like as her descendants emerged, increased and multiplied, populated the Earth.

"Are you hungry?" Loris asked. "You've been fed intravenously two days, now. What medical knowledge we possess has been used to repair the injuries sustained in the crash."

IT TOOK a little time for the significance to sink in. "*Medical knowledge?*"

"We don't have much. Nothing to compare with your own. We're hampered by lack of tradition. All we have to go on are the history spools made from dredge reports. What we've been able to organize is sketchy, patched-together. And with the whole society against us—"

"Who are you? A group?"

Loris smiled. "No. Just myself and a few others. A few who are—sympathetic."

"Within your tribe?"

"Yes."

Parsons was beginning to see the situation. "Not the Central Government. They didn't know why I was here. Not the random people I encountered. No understanding. No place. I was beginning to think I was washed up. It looked like no contact was coming. They were serious about sending me to the prison colony on Mars. That was on the level."

"The Government won't know for another twenty-four hours that something has gone wrong. A routine check during the next day will reveal the rocket never arrived at the prison colony. They'll begin to trace it back. After a few months it'll officially be written off as 'lost in space.' Struck by a meteor.

Such does happen, from time to time."

"I never left Earth, did I?"

"The rocket was brought down ten miles up. Right now you're approximately twenty miles outside the city. It's unfortunate we failed to make immediate contact with you as soon as you arrived. The dredge is highly inaccurate. We couldn't narrow it down to an exact day or place. We had only a general idea which continuum you'd enter. The Government got to you before we did. They have considerably greater resources."

"Suppose they learn the rocket was brought down? And that I'm here—and not a burnt cinder out in space?"

Loris shrugged. "Probably, they won't. And this is tribal ground. No Government people are allowed here. There was a risk, but it had to be taken. It was imperative to get you here. The failure to make contact in the initial moments, the critical first hour, had to be rectified."

Parsons considered before he spoke. "Up to now I've been working in the dark, not knowing why I was brought here—or by whom. Now I know. Things are beginning to get a little clearer. You say you've done some medical work." He chose his words carefully. "Is there a medical problem you've tried to solve—and failed? A problem beyond the ability of this society?"

Loris had stopped pacing. She stood unmoving at the foot of the-luxurious bed, an intense frown on her face. Abruptly she tossed her head in a gesture of decision that sent a shower of dark hair swirling. "Yes. We have such a problem."

"What is it?"

Loris was breathing quickly, short harsh gasps. Her lips were half parted, her fists clenched at her sides. Tidal emotions shuddered through her.

"Watch!" She turned to the wall, pressed a stud, then stepped back out of the way.

The wall dimmed and faded. It flickered—and was gone. Parsons sat up,

conscious of the tension of the woman, the significance of the moment. He didn't know what to expect. But whatever it was, it was important. It was the reason for his presence. For the whole chain of events that had started so suddenly, that had altered his whole life.

They were looking beyond, into another room. A chamber. It reminded Parsons of something, some place he had seen. He concentrated. Was it—the Fountain!

Not quite. Everything here was minute, microscopic in comparison. This chamber was a replica of what he had seen at the Fountain. A miniature—letter perfect. The same syndromes of equipment, power cables, freight elevators, but greatly reduced in scope and size. And at the far end, the gleaming blank surface of a cube—a small cube, perhaps ten feet high and three feet in depth.

"What's in it?" Parsons demanded.

LORIS hesitated, then touched the stud again. The blank face of the cube faded. They were looking inside, into its heart. Into the swirling liquid that filled it.

A man stood upright, suspended in the depths of the cube. He lay motionless, arms at his sides, eyes shut. With a shock, Parsons realized the man was dead. Dead—and somehow preserved within the cube. He was tall, powerfully built, great gleaming coffee-colored torso. His nude body was maintained uncorrupted by this miniature Soul Cube, this small version of the great cube at the Fountain.

Instead of a hundred billion zygotes and developed embryos, this small cube contained the preserved body of a single man, a fully developed male perhaps thirty years old.

"Your husband?" Parsons asked.

"No. We have no husbands." Loris was gazing at the man with great emotion. She seemed in the grip of a swelling tide of feeling. "All reproduction is

handled through the Fountain."

Parsons persisted. "You had an emotional relationship? He was your lover?"

Loris shuddered—then abruptly laughed. "No, not my lover." Her whole body swayed, trembled, as she rubbed her forehead and turned away from Parsons for a moment. "Although we have lovers, of course. Quite a few. Sexual activity continues, independent of reproduction." She seemed almost in a trance. Her words came slowly, hesitantly. For a time she was silent. Then she reached out a shaking hand and touched the wall stud. The cube faded back to an opaque surface and the figure within its depths disappeared from sight. The wall of the room again came into being, and the chamber beyond vanished.

Loris began to pace restlessly back and forth. She was still fighting with her emotions, struggling with herself, oblivious of Parsons. Her whole body was tense with the battle. It shuddered and rippled through her, stirred her loins and shoulders, caused her to clench and unclench her fists and set her white teeth together.

Abruptly she whirled toward Parsons. "When do you think you'll be recovered?"

Parsons blinked. "I—"

"Time is short. As soon as you can begin to function, we'll give you opportunity to repay your debt." Her husky voice was harsh, impatient. "We saved you from the prison rocket. You'd be there, by now. At the colony. If it hadn't been for us."

PARSONS was startled by the desperate urgency written across her handsome face and in the harsh tinge to her voice. "I don't know how soon I'll be able to work. Not long, I suppose."

Loris signalled and an armed guard quickly entered the room. He laid something carefully down on the luxurious carpet and moved back a pace.

Parsons recognized the object instantly. His gray-metal instrument case.

"We examined them," Loris said, "but their functions are beyond us. We have no comprehension of medical work. We can't grasp the basic principles! With the time dredge we've brought back endless spools of information, but we can't do anything with them. Our orientation—lack of tradition, our whole training makes it impossible to apply the knowledge."

"How did you get this case back?"

Lois shrugged impatiently. "How do you suppose?" She nodded to the guard and moved toward the door. "You'll be guarded. This man will remain here at all times. When you want me he'll relay the message."

The sight of the gray-metal box made Parsons realize the extent of their problem. They had no doctors here. They had dredged up the necessary knowledge, but no one had been able to apply it. They had finally been forced to go outside, beyond their own culture. They were desperate. To bring him here, out of his own world, to do something they couldn't do themselves, they had taken this incredible risk.

"The man in the cube," he said. "You want me to examine him?"

"The man in the cube," Loris said slowly, "has been dead thirty-five years. The medium of the cube is cold-pack, the arresting substance used to maintain the zygotes at the Soul Cube. Perhaps he can be restored. Perhaps not. In any case, you will be expected to do what you can." Loris halted for a moment at the doorway. "The man is my father. It means a great deal to me. Anything you can do."

"And if I do, will you send me back to my own time?"

"We shall see," said Loris, and left him.

LORIS *must* have him back," the voice grated.

Parsons froze. He stopped work. "Who—"

"All her life she's been devoted to that one task," the voice continued. "Everything she's done has been with one purpose in mind: to bring him back to life. He was a great man. The greatest the world has ever seen. He died in his prime. A tragedy. Loris won't rest until she has set it right."

Parsons turned from the work table. A man stood directly behind him, in the gray robes of the Wolf Tribe. For a flash Parsons was struck dumb. His mouth opened, but nothing came. *The man in the cube, the dead man—*

No. Like him, but someone else.

"Who are you?" Parsons demanded shakily. It had given him a real scare. Above him rose the gleaming cube. Within its depths the silent figure floated, the massive body, powerful head, iron-gray hair, stern nose and jaw. This man in the gray robes bore a superficial resemblance. But now that Parsons looked more closely he realized this man was a youth, a mere boy compared to the giant suspended in the depths of the cube.

"I'm Helmar," the man said. "Loris told me I'd find you here. I'm in charge of the cube. What little I know has kept it functioning."

"You didn't build it," Parsons said slowly. "It must have been built before you were born."

"That's right." Helmar's eyes moved curiously toward the open instrument case and the charts and report spools. "Any results?"

"Nothing so far."

"What do you think? Is there any chance?"

"I don't know. It all depends on how much deterioration there's been. The brain tissue breaks down almost at once. If that's happened—"

"Cold-pack was applied at the instant of death. There was no time lapse. It should say so in the reports."

"It says the man died of suffocation. How? Why? What were the circumstances?"

Helmar's youthful face was blank. "I

have no idea. That was thirty-five years ago. No one alive today knows more than what you've seen on the spools."

Parsons eyed the youth. He had had plenty of time to do some deep thinking during the last ten days while recovering from his injuries.

VI

HE HAD learned something of the physical lay-out of the place. As Loris had said, he was about twenty miles from the city, the great hub of spires and webs, where the Fountain squatted, with its precious Soul Cube within. This place was the Manor, the official castle of the Wolf Tribe. Loris, as the Mother Superior, occupied the grounds with her retinue of lovers, attendants, guards; servants, workmen, and numerous friends.

There were plenty of friends, coming and going continuously. Racing back and forth from the city in their bright little drops of color. Shooting down the white bands that made up the intricate network of roads connecting the cities.

The Manor was self-contained. Like an ancient Roman villa, it was totally independent economically and physically. Underneath the buildings were massive power turbines, atomic generators centuries old. He had briefly glimpsed the subterranean landscape of grinding gears and whirring shapes, rust-covered masses of machinery that roared and throbbed ceaselessly. Then he was quietly turned back by armed guards who appeared abruptly in front of him and questioned his presence. He had been forced to fill in by inference.

Food was grown artificially in sub-surface chemical tanks. Clothing and furniture were processed from plastic raw materials by robots working someplace on the grounds. Building materials, industrial supplies, everything that was needed was manufactured and repaired on the Manor grounds. A complete world, a self-governing cosmos, carefully guarded and maintained. He

had seen a lot—but it was relatively little compared to what had been denied him.

The core of the Manor, like the city, was the cube. The miniature "soul" beside which he was now working. He didn't need anyone to tell him how carefully the secret of its existence was kept. Probably only a few persons knew of it; probably not more than a fraction of those living at the Manor. And how many of them understood its purpose, the reason for its existence—perhaps only Loris herself knew.

"Are you related to Loris?" Parsons asked Helmar bluntly.

"Why do you ask?"

"You resemble the man in the cube. Her father. And you resemble her, faintly."

Helmar shook his head. "No relation."

Parsons started to ask him more—but Helmar had abruptly turned his back. Apparently he considered the matter closed. He was intently examining Parsons' instruments, carefully laid out on the work bench.

THERE were things Parsons didn't understand. Things he hadn't been told. Too much was being kept back from him. He accepted the obvious: that Loris was acting illegally. Had been for some time. The very possession of this miniature cube was clearly a crime of the greatest magnitude. The maintenance of the body, the attempt to restore it to life, the capture of the prison rocket—all were part of a carefully guarded plan of which the government and probably the other tribes knew nothing.

He could understand Loris' desire to see her father alive. It was a natural emotion, common in his own society. He could understand the elaborate lengths she had gone to, in attempting to realize that wish. With her great power and influence, it might actually be possible to do this—as contrary as it was to everything the society stood for. After all, the man had been preserved thirty-

five years. The cube, the elaborate maintenance equipment, the whole Manor was geared to this task. If so much had already been done, the rest might follow.

Only one thing didn't make sense. In this society, all zygotes were developed and preserved by the Fountain, in a common central pool. Each birth occurred at the Fountain, a purely artificial process.

How did Loris know the man in the cube was her father?

"There must be something I don't know about your system," Parsons said to Helmar.

"Why?"

Parsons chose his words carefully. "I was told by Director Stenog all zygotes were formed within the Fountain. That gametes not utilized by the Fountain, were destroyed."

A heavy mask slid over Helmar's features. He shrugged indifferently. "It's difficult for an outsider to comprehend the complicated relationships of another culture."

"This man, Loris' father. Was he born at the Fountain?" Parsons saw the youth tense. "Or was he—"

Loris appeared and Parsons broke off. "How is work coming?" she demanded without ceremony.

Parsons forgot Helmar. "I've made a complete study of the charts and record spools. Before the cold-pack is withdrawn it's vital I know exactly what shape I'll find the body in."

Loris had been sunning herself. She wore a knee-length robe of some transparent gray plastic, fastened at the waist with a leather cord. She was barefoot. Her thick black hair was tied back and fastened with a metal comb. Her sharply-cut features showed extreme impatience. "I want to know what you think. Can it be done? Can he be restored?" She was watching him intently, hanging on his reply.

Parsons hedged. "I won't know until I actually begin work. If I knew more of the circumstances of the man's death —"

"No one knows more. None of us was alive at that time." Loris hesitated uncertainly. "Don't you have enough to go on? You have all those spools and charts!"

"Who built this cube?" Parsons demanded bluntly.

Loris froze. "Why?" Her voice was hard.

"This whole layout must have existed before any of you were alive. Somebody who preceded all of you—somebody who knew a hell of a lot about cold-pack and the whole cube system."

"The design," Helmar said slowly, "is the same as the Fountain the Central Government maintains. No special knowledge was required to duplicate on a small scale what the Government operates on a large scale."

"Somebody brought schematics here and constructed all this," Parsons persisted. "Obviously at great risk—and for considerable purpose."

Loris indicated the man suspended within the depths of the cube. "To preserve him."

Parsons pounced like lightning. "Then the cube was built *after* his death?"

LORIS and Helmar glanced quickly at each other. A look passed between them. An uneasy, wary look. It was Loris who finally broke the silence and answered. "I don't see," she said slowly, "what this has to do with your work. We saved you from the prison rocket. All we ask is that you do your job—the work you're skilled at. What you must have done most of your life. As you said yourself, one of the basic ideological factors we can't comprehend is the doctor's ethical conviction that all deserve healing—no matter who they are."

"What happens if I succeed?" Parsons asked. "What happens to me when I've finished my work?"

There was no answer. Loris turned and moved off, without a word.

Helmar tapped the report spools. "It would be appreciated if you would work

as quickly as possible. You can understand her feeling. She's waited all her life for this—the time when he might be restored. There's never been any chance before. We have no medical ability—only random scraps we've gleaned from past ages. Your arrival here changes the whole picture. It was extremely difficult. The dredge is inaccurate, almost unmanageable. We had to pass at you repeatedly."

Parsons grunted sourly. "Did you ever consider I might not want to come? Maybe I didn't want to leave my own time, my family and everything I'm familiar with. I've been tossed around like an inanimate sack of equipment—valuable, but not really sentient. I'm nothing but a pawn in all this. A time pawn, yanked from one world to another!"

"Loris risked everything to bring the rocket down," Helmar continued patiently. "To save you from the prison colony. The whole program was put in jeopardy by that overt show. The Government will trace the flight all the way back to the launching stage. It was the greatest risk we have ever taken. A major calamity occurred, when Government agents got to you before we did."

Parsons believed him. It had been a risk, all right. Although he might have pointed out that it wasn't his fault he had been on the prison rocket or even in this world. And no doubt Loris wanted the man in the cube restored at any cost. He could easily believe the powerful, splendidly-built woman lived for the moment when her father would be returned to life.

But his questions hadn't been answered. Loris and Helmar were holding back information.

He filed his suspicions away for future consideration and turned back to the charts and report spoils.

THERE is a basic fallacy in their thinking," Loris murmured, half to herself.

It was evening. Parsons and Loris were standing on the balcony of the

main Manor building, watching the distant lights of the city. The lights shifted and moved constantly. An ever-changing pattern that glittered and winked through the clear darkness of the night. Like man-made stars, all colors.

"Who do you mean by *they*?" Parsons asked.

Loris started. "What?" She waved her hand vaguely. "The Central Government, I suppose. The whole system. The Soul Cube. The Lists. That girl, Icara. The one you saved—"

"It didn't do any good. She killed herself as soon as possible."

"I know. It's common. An accepted part of our society. She killed herself because she had been disfigured. She knew she'd drag down the tribe when List time came. She knew she'd score badly because of her physical appearance. *But such things aren't inherited!*" Bitterness swept through Loris' husky voice. "She sacrificed herself for nothing! Who gained? What good did her death do? She was certain it was for the good of the tribe—for the race. But how could it possibly benefit the race? Sickness and injury aren't carried by the genes. The Lists test things which are not related to heredity and are not transmitted to the next generation."

Parsons had been thinking that, too. "But her act was rational in terms of the system. The way it's set up, her death *did* benefit her tribe. As long as the Lists test such things as physical appearance—"

"Then it's the system that's at fault!"

Parsons didn't argue with her. He glanced at her tall, stately figure outlined against the railing of the balcony, a regal column in a dark gray evening gown, fur neckpiece and gloves, fur slippers instead of sandals. How deep did Loris' resentment go? How much of the system did she personally reject? Was this only a momentary emotional outburst of bitterness—or was there more?

"How was your father killed?" Parsons demanded suddenly.

Loris pulled away. "I—don't know."
"Do you blame the system for his death?"

Loris made a strange, choked moan. Parsons was startled. He could only barely distinguish her shape in the darkness. She had turned her back to him, and stood with her arms folded tightly, body swaying. "I'm cold," she gasped. "I think I'll go inside."

Parsons reached out and touched her arm. She jerked away from him violently. "What is it?" he asked her. He could hear her close beside him, breathing in deep gasps that made her whole body shudder. As if she were trying to force something down, to keep her emotions under control.

LUMINOUS night moths fluttered beyond the railing, among the trees and moist bushes. Someplace in the forest small animals crashed around, growled, moved sullenly off. Sounds of breaking twigs, stealthy footpads. Hissing.

"Cats," Loris whispered shakily. "Domestic cats."

"Gone wild?"

She nodded faintly. "Yes. Gone wild." She seemed to have got hold of herself. She was wiping her eyes with her knuckle and trying to smile. Dimly, Parsons could make out her face, her trembling lips, long lashes, great black eyes sparkling with tears.

"I'm sorry," Parsons said. "I didn't mean to—"

"It's all right. We've been under a lot of strain. For a long time. All my life. You understand—I've never seen him alive. He was dead even before I was born. He had been dead three years." Her lips twisted. "To see him, day after day, suspended in there, beyond reach, beyond touch—utterly remote from us."

"Like a god."

"All the time I was growing up I thought of nothing else. To bring him back. To have him again, to possess him. If he could be made to live again—" Her hands opened, reached out, yearn-

ing, groping, closing again on nothing. "It's been our goal. Our one desire. What we can do, once we have him back —" Abruptly, she broke off.

"Go on," Parsons prompted.

Loris shook her head and turned away. Parsons touched her soft black hair, moist with the night mist. She didn't protest. He drew her close to him; still she didn't protest. Her warm breath drifted in a cloud, rising around him, mixing with the sweet scent of her hair. Against him her taut body vibrated, intense and burning with suppressed emotion. Her bosom rose and fell, outlined against the darkness, her body trembling under the silk of her robe.

His hand touched her cheek, then her throat. Her full lips were close to his. Her eyes were half-closed, head bent back, breath coming rapidly. "Loris," he said softly.

She shook her head. "No. Please, no."

"Why don't you trust me? Why don't you want to tell me? What is there you can't—"

With a convulsive moan she broke away and ran toward the doorway, robes fluttering behind her.

Parsons started quickly after her. "Loris!"

From the darkness a shape loomed ominously. A presence grimly blocking his way. Parsons halted, chilled.

"Don't follow her," Helmar grated. "I told you not to bother her, Parsons. If there's any more of this—" Something gleamed in Helmar's hand. It looked like an eggbeater. With a rush of horror Parsons identified it. The sadistic weapon Kem had used on Icara.

Did they all carry them?

He retreated reluctantly. "I guess I don't have much choice. Maybe sometime when you don't have that little gadget with you, we might—"

"Come along with me," Helmar cut in, motioning toward the descent ramp. He waved the gleaming metal eggbeater. "Let's not waste any more time."

"What's this all about?" Parsons demanded.

Four armed guards detached themselves from the shadows and closed in around Parsons. "You've had plenty of opportunity to study the charts and record spools," Helmar stated. "If you can't restore him to life now, you'll never be able to. We've had enough stalling."

He moved off rapidly toward the descent ramp. The four guards prodded Parsons into motion. "I'm coming," he muttered. "Keep your hands off me."

He moved slowly after Helmar, his mind spinning. Things had begun to happen. Maybe now he'd find out some of the missing facts they had been holding back.

VII

THE chamber was a blaze of lights. The miniature cube had been removed from its mount and laid on its back. Within its depths the inert figure rested quietly, eyes closed, body limp. The dead god, suspended between worlds, waiting to return. . .

The chamber was crowded. Men who had stayed in the shadows until now were beginning to emerge. Parsons hadn't realized the extent of the project. He paused to take in the sight of the first appearance of the real force, the actual strength that operated the Manor.

Was it his imagination—or did they resemble one another? Of course, all members of this society looked somewhat alike to him: the same skin color, eyes, skull formation, hair texture. They all came from a common stock. And this group of men and women appearing on every side of him wore identical clothing, the gray robe and chest-emblem of the Wolf Tribe.

But there was more. A certain heavy brow. Wide forehead. Flaring nostrils and prominent jaw. Strong chin. Powerful frame and shoulders. As if they were all a family.

He counted forty men and sixteen women and then lost track. They were

moving around, murmuring and talking with each other. Taking places where they could watch him as he worked. They wanted to see every move he made.

"I am aware," Helmar said, close to his ear, "that this may fail. Your skill may be insufficient. In the event of failure, you will be destroyed at once—whatever the specific reason."

The bluntness of Helmar's words shocked Parsons. "You believe in coming right out and saying what you mean. At least, you do *now*. I'm getting the unvarnished picture, finally."

"I want you to know the situation. You have a certain ability and knowledge—which this world utterly lacks. For that, we brought you here. You can be of paramount value to us. But if that ability fails, you are merely another human being."

"What happens if I succeed?"

"Then we will be in your debt. And if we cannot return you to your own time, you will be kept here and protected from the Central Government."

With a sinking feeling, he turned away. The cube had been opened by Manor technicians. The cold-pack was being sucked out greedily by plastic suction tendrils. In a moment the body would be exposed.

"These people shouldn't be here," Parsons said nervously. "I'll have to open his chest and plug in a Pump. Danger of infection will be great."

The men and women heard him, but none of them stirred. "You worked on the girl before others," Helmar answered smoothly. "You have sprays and sterilizing toxins. Use them."

PARSONS cursed under his breath. He turned away from Helmar and slid on his plastic protection gloves. He began to arrange his instruments out on the work table. As the last of the cold-pack was drained off by the suction tendrils, Parsons flicked on a high-frequency field and placed the potentials on each side of the cube. The terminals hummed and glowed as the field warmed.

Now the inert body was within a zone of bacteria-destroying radiation. He concentrated the field briefly on his instruments and gloves. The watching men and women took everything in without expression, faces blank masks of concentration.

Abruptly the cold-pack was gone. The body, for the first time in thirty-five years, was exposed.

Parsons moved into action. There had been no decay. The body was perfectly fresh. He touched the limp wrist. It was *cold*. A chilling miasma that trickled up his arm and made him quickly let go. The utter cold of outerspace. He shivered and wondered how the hell he was going to work.

"He will warm rapidly," Helmar gratified. "It's no form of refrigerator you're familiar with. Molecular velocity has not been reduced. It has been differently phased."

The body was now warm enough to touch. Whatever alteration had been made in the vibration pattern, the molecules were already beginning to return to their natural orbits. The man had been suffocated, all right. His face was taking on a bluish cast. Oxygen starvation. The lungs were immobile.

Parsons locked a mechanical lung in place and activated it. While the lung exerted rhythmic pressure on the inert chest, Parsons concentrated on the heart. He punctured the rib cage and plugged the Dixon Pump into the vascular system, bypassing the suspended heart. The Pump went immediately to work. Blood flowed. Both respiration and circulation resumed in this body that had died thirty-five years ago! Now, if there hadn't been much tissue deterioration from lack of blood—

The chamber was tense. They were all watching the body. No one moved or breathed. There wasn't much more he could do. The records indicated no organic injuries. Parsons touched the man's neck. A thin crease had been pressed into his throat. The outline of a wire? Had he been strangled? Al-

ready, the crease was disappearing. However his death had been accomplished, there was no certain mark. Nothing of which he could be positive. Could the man simply have held his breath?

Impossible. No human could do that. Automatic neural reflexes would have maintained lung action, whether the individual willed it or not.

Paralysis? Some kind of muscle-freeze? Maybe a beam of some kind. One of their neat little weapons.

Silently, unnoticed, Loris had come into the chamber. She was watching, bright-eyed, her handsome face pale. Rigid as stone. Like all the others, holding her breath.

Parsons started to address her, but Helmar cut him off. "Don't speak to her. Concentrate on your work."

One of the men across the table turned to Loris. "Nothing yet."

Loris nodded slightly.

"I should have more data," Parsons began. "I have no way of telling how his respiration was initially—"

The man stirred. His eyes opened.

A gasp came from the watchers. A simultaneous expression of amazement and joy.

"He's alive," Helmar breathed. "Thank God."

The man was looking up at them. His eyes moved as he focused. His powerful body twisted. He raised one arm slightly, haltingly, then lowered it again.

Parsons pushed Helmar aside. "The crucial part comes next." He waited a moment, breathed a silent prayer, and then touched the switch on the mechanical lung.

THE mechanical lung died. Swiftly, Parsons slipped it from the man's body and laid it aside. He waited tensely, watching the rising and falling coffee-colored chest for any sign of failure. It continued to move—without the lung.

Parsons sagged with relief. "He's

taken over. His own respiratory system is functioning. We'll leave the Dixon Pump on for awhile—as a safety precaution."

"You think he'll live?" Helmar whispered.

"I think so. He's breathing normally. That's the miracle, the crucial point."

The chest hesitated. For a terrifying moment it ceased. Horror swept through the watching men and women. A frightened hum of dismay rose from their throats. Then the man breathed deeply, hoarsely. Again the agonizing pause—followed by deep, loud gasps.

"What is it?" Helmar demanded excitedly. "Is he all right?"

Parsons grinned shakily. "He's fine."

"But what—"

"You've never seen a baby being born. That's Cheyne-Stokes breathing, something babies do before they establish a regular pattern. Curious, that this man should revert so far. As if he were being born again."

There was almost a religious awe in the silence that filled the chamber, the rapt, intense faces, eyes wide, mouths half open. Men and women transfixed with wonder. A circle of gray-robed men and women in the grip of overwhelming emotions. They had waited a long time for this miracle. And it had finally come.

"Very much," Helmar murmured. "Very much as if he were being born again."

Parsons started to say something. But his words choked off. He had, for the first time, noticed *her*.

SHE HAD come in silently, a few moments after Loris. Two armed guards on each side of her. A great stir now moved through the chamber. The awed silence was broken. Everyone was talking and murmuring and moving aside to let her pass.

She was old. The first old person Parsons had seen in this world.

"He's alive," Loris said to the old woman, her face radiant, transfigured

with a hot glow rising up from within. "He'll live again."

The old woman advanced silently toward the cube, toward the man who lay within. She was, even at her age, unusually handsome. Tall and dignified. A mane of white hair down the back of her neck. The same broad forehead. Heavy brows. Strong nose and chin. Stern, powerful face.

The same as the others. The old woman, the man in the cube, everybody in the room—all partook of the same physical characteristics.

The stately old woman had reached the rim of the cube. She gazed down, unspeaking. In the cube, the man stirred feebly. His eyes were open. He saw her, the old woman bending over him. Wonderingly, he gazed around the room, at the circle of gray-clad men and women standing on all sides of him.

What did he think? There was no telling. His massive face was blank with wonder. The group of men and women, sturdy, handsome, strong-bodied, so much like him.

"How—are you?" the old woman asked in a deep, vibrant voice, thick with emotion. She reached down and touched his forehead.

The man's lips moved. There was baffled confusion in his eyes. A glazed look of bewilderment—and dawning fear.

Parsons approached. "We should be careful. He's still weak. It'll be some time before the danger is over."

The old woman became aware of Parsons for the first time. Abruptly, her features hardened into distaste. "Who are you?"

Loris took her arm. "Mother—"

There it was. The old woman was Loris' mother. The wife of the man in the cube.

It fitted. He had been in the cube thirty-five years. The old woman was probably seventy. *His wife!* This pair, this couple, had spawned the powerful full-breasted creature who ruled the Wolf Tribe, the most potent human being alive.

"Mother," Loris said softly, but firmly. "He's right. He's the man who brought Corith back."

The old woman was still looking frigidly at Parsons. Gradually her features softened. "All right." She lingered by the cube a moment, touching the frowning, baffled forehead with her pale fingers. "All right. Later. When he's stronger. We don't want to take any chances."

The old woman and her attendants moved away, back toward the lift from which she had emerged. She had come up from the subsurface levels of the Manor. The levels forbidden to Parsons. The guarded, secret core of the Manor.

All the men and women stood silent as the old lady passed among them. Heads bowed slightly. Reverence. They were all acknowledging her, Loris' mother. The regal white-haired old woman who moved slowly and calmly across the room, away from the cube. The mother of the Mother Superior—

Something clicked in his mind.

The mother of all of them. She had halted at the lift a moment and half turned. She made a faint motion with her hand, a motion that took them all in. She was recognizing them. All the faces.

Her children.

It was clear. Helmar, Loris, all the rest of them. The same physical characteristics. All seventy of them were descended from this old woman, and from the man who lay in the cube, breathing for the first time in thirty-five years. Breathing like a new-born infant.

Yet—one thing didn't fit.

The man in the cube and this old woman. If they were man and wife—

"How is he?" Loris asked, interrupting his thoughts. The old woman had entered the lift and was gone. The chamber moved back into sound and motion, its activity resumed. "What are his chances, now that he's breathing again?"

"Good," Parsons murmured. His mind was racing. *The old woman and the man in the cube.* Corith, she had

called him. Corith. Their father. That made sense. Everything made sense but one thing. And that one thing was a little difficult to get past.

Both Corith and the old woman, his wife, showed identical physical characteristics.

"What is it?" Loris was demanding. "What's wrong?"

Parsons shook himself and forced his mind to turn outward. "We should move him," he muttered. "Get him out of the cube and into bed where he'll be kept warm. Feeding should begin as soon as possible."

Loris gave orders. Guards lifted the unprotesting body onto a transport cart and covered it carefully with wool blankets. The car was wheeled quickly from the chamber, onto an ascent lift. The lift doors slid shut after it.

"Will you continue to watch him?" Loris asked anxiously. "To make sure nothing goes wrong? It would be terrible if something went wrong—if he were to die again."

"Of course." Parsons moved automatically toward the lift. What was lacking? What factor had been left out? Some vital element was missing. He understood—but not completely. Something basic hadn't become known. It was obvious this was a single family, descended from Corith and the old woman. All of them were brothers and sisters. But that still didn't explain the physical resemblance between Corith and his wife. The thing had to be carried back to another level.

As he came to the lift he saw something. Something that made him freeze abruptly into immobility.

This time, he was the only one who had seen. The others were talking together excitedly, their backs turned. Even Loris hadn't noticed.

Here was the missing element. The basic key that had been lacking.

VIII

SHE was standing in the shadows, at

the very edge of the room. Out of sight. She had come up with the other old woman, Loris' mother. But she had not emerged from the darkness. She remained hidden. Watching everything that happened, from her place of concealment.

She was unbelievably old. A tiny shriveled-up thing. Wizen and bent, claw-like hands, broomstick legs beneath the hem of her dark robe. A dry little bird face, wrinkled skin, like parchment. Two dulled eyes, set deep in the yellowing skull, a wisp of white hair like spider web.

"She's completely deaf," Helmar said softly, close by him. "And almost blind."

Parsons started. "*Who is she?*"

"She's almost a century old. She was the first. The very first." Helmar's voice broke with emotion. He was shaking visibly, in the possession of primordial emotions that vibrated through his whole body. "Nixina—the mother of them both. The mother of Corith and Jepthe. She is the *Urmutter*."

"Corith and—Jepthe are brother and sister?" Parsons demanded quickly.

Helmar nodded. "Yes. We're all related."

The ascent lift had come. Parsons moved reluctantly into it. There were endless questions he wanted answers for—but Helmar had already gone, and the doors were sliding shut. The lift began to rise, carrying him along the route they had taken Corith.

His mind spun wildly. Brother and sister. Yet, parents of Loris, Helmar, all the others. All the group.

Inbreeding.

But why? And—how?

How was inbreeding accomplished in this world—where the racial stock was thrown into one common pool? How had this magnificent family, this genuine family, been maintained?

Three generations. The grandmother, the mother and father. Now the children.

Helmar had said: *She was the first*. The tiny shriveled-up creature was the

first—*what?*

The lift halted. In a daze, Parsons moved out into the corridor. Desperately, he tried to comprehend what he had learned. He needed time. *Time*.

"This way," an armed guard directed, indicating a heavily-guarded doorway.

Parsons passed slowly inside, between the double row of guards. Into a luxurious bedroom, one of Loris' own chambers.

Corith lay in a silken bed, arms at his sides, his massive head resting on two soft pillows. His chest rose and fell under the rich covers. The Dixon Pump whirled efficiently, a bulging square of metal and plastic rising up on the right side of his body.

Corith was watching him. Studying him as he came into the room. Following his movements.

"How do you feel?" Parsons asked him.

The lips moved faintly.

Parsons bent down. "Do you understand what has happened?"

"It is—later." The voice was almost inaudible.

"Thirty-five years later. A whole generation. You saw your daughter?"

"The—woman? With the Wolf on her breast?"

"That's your daughter, Loris." Parsons' ear was almost to the man's lips. "All of them are your sons and daughters. Your wife has aged. She's over seventy. And your mother. She was there."

Corith struggled to speak. He gasped, fought to collect his mind. "You are—"

"A doctor. I was the one who brought you back."

"A—doctor?"

Parsons smiled. "From the past. From another age. I was brought forward in time. To repair and restore you. To bring you back to life."

The answer wasn't what he had expected. It jarred him violently, when it came. The words were faint, but sharp and biting, with an inner desperation that cut like a savage knife-blade. "You

fool! You damn fool! I died *once* to get away. Wasn't that enough?"

Parsons was dumbfounded. "You killed yourself? But—"

"They're insane!" the urgent rasp came. "All of them. My wife. My mother. The whole crowd. They want to seize power and kill off everyone else—destroy the Fountain, the Soul Cube. Get out of here, whoever you are! Get to the Central Government. Man from the past—now you know the truth!"

The massive head lifted from the pillow in a spasm of despair. A trembling, wrathful face, god-like features torn with agony and horror.

"It's your fault! You brought me back. You've got to set things right. *You've got to get out of here!*"

PARSONS looked quickly around. The guards at the doorway had certainly heard. Time was running out fast. He leaned close to the man on the bed. "They're inbred—but *how*? Aren't all births from the Fountain? From the common stock?"

Corith laughed harshly. "That's where I come in. Nixina was the beginning. My mother—the first of us. She got me past the birth-process station unsterilized. The only unsterilized male of the new race. After me, the Government clamped down sterilization through the entire culture."

"New race?"

"Mutants. A higher species—according to them. I bred with my sister, Jepthe. Her gametes were matched with mine as they entered the Soul Cube. She kept strict watch. None of her seed was diffused into the common stock."

"And they were born from the Fountain?"

"Our minor cube failed. We could preserve zygotes but not give them birth. We had to depend on the Fountain. A bitter blow. We had to depend on their processes."

"Your mother was the Mother Superior." Parsons understood. "She had periodic access to the Fountain."

"Then Jepthe. And now my daughter Loris." Corith's face contorted wildly. "She wants me! She wants to mate with me—have children by me—populate the world! Erase all but our spawn. Destroy all others, all the common race. But I killed myself. I deprived them of my seed. I escaped."

"But these others. The third generation males."

"Sterile! Too late. When I was born, the Government was already passing males through sterilization-process stations. Nixina maneuvered desperately to get me past. I was the only one—and *I died!* Without warning I destroyed myself, ruined their plans. They needed more zygotes. Jepthe and I had formed only eighty. Then I learned what Nixina and Jepthe were planning.

At the doorway the armed guards stirred. One of them moved away, down the hall.

Instantly, Parsons became alert. "They must have heard." He glanced quickly around. "We're twenty miles from the Fountain."

"Forget about me and go. Hurry! Before they—"

Corith broke off. Helmar entered the room, the flashing-bladed eggbeater in his hand. He took in the scene, Parsons standing by the bed, Corith's twisted, pain-wracked face. His fingers tightened around the butt of the eggbeater.

Parsons swung. Helmar ducked and slid agilely to one side. The hall outside echoed with sounds. Guards poured into the room. Gray-robed figures came hurrying, pushing in after the guards. Helmar had dropped back, face livid with hate. Now the eggbeater came up—aimed square at Parsons.

"All right, *doctor*," Helmar said coldly. "Sorry to have to do this, but—"

"Run!" Corith shouted. And tore the beating Nixon Pump from his chest.

Blood gushed from him. He gasped, his eyes filmed over, his body sagged limply. Loris shrieked, a shrill wail of despair. Helmar dropped the eggbeater and ran to the bed.

"*Corith!*" Loris, screaming and sobbing, threw herself on the dying man. "Help him! Help him! Don't let him die again!"

Parsons hesitated. Guards were milling excitedly around the room. Helmar and Loris struggled wildly, futilely, to stop the spurting blood that gushed up between their hands, down their arms and formed a thick pool on the silk covers. Parsons moved half a step toward the bed.

A GUARD grabbed him roughly. He lashed out and connected. The guard grunted and slid aside. Another loomed up. Parsons kicked him and grabbed his gun from his paralyzed fingers. He smashed at a shape barring his way, a gray-robed woman. She wailed and crumpled. Parsons hurried past her, out the door and into the corridor.

Gray-robed figures were everywhere. Pushing and shoving in confusion, faces blank with horror and grief. Moaning and crying like helpless children. Parsons made his way through them and began to run. The sounds dimmed as he turned off to the right.

He was high up. Above ground level. He ran down a flight of metal steps and emerged from the building, out on a wide balcony.

The night was cold and black. Stars glittered above. Dimly, he could make out the shapes of trees beyond the balcony. He was about fifteen feet from ground level.

Guards were pounding down the passage behind him. Shouts, metal against metal. A siren wailed someplace and was joined by another. The first guard emerged, blinked in the sudden darkness, raised his gun and fired 'blindly.

The bolt passed over Parsons' head as he scrambled over the railing. For a second he poised, still holding on. The guard was joined by others, shapes cutting off the light, spilling out and feeling their way toward the rail. A spotlight was dragged up. Cables and shouting

men. The flash of guns and boots.

Parsons let go.

He landed on his feet, rolled down the moist side of a hill, crashed and came to rest in a tangle of vines that slapped and cut at him. His ankles ached. His head spun. But no bones broken.

Fingers of heat probed for him from the balcony above. The spot traced an uncertain line among the trees, searing light mixed with the flash of the energy guns. They converged briefly on a shrub, puffed it to ash, then came on, leaving a trail of glowing rubbish behind.

Parsons scrambled to his feet and tore the vines loose. His eyes were getting accustomed to the gloom. He felt his way quickly forward, down into a hollow, up the side of a hill. He increased his pace, bent over, taking deep breaths and not looking back.

"Stop!" A desperate, pleading voice from the balcony, a piteous wail that was picked up by the night wind and tossed about, lost in the rustling of the great trees. Parsons kept on. It was Loris. As he turned down a dry creek bed he caught a momentary glimpse of her, outlined against the doorway. Surrounded by guards and gray-robed figures, who were already coming over the railing after him.

Patrol cars roared out of the stone-walled rim that surrounded the Manor. Their headlights lit up the night on all sides, racing drops that shot forward at reckless speed. Parsons left the gully and came up onto a meadow. He missed his footing, stumbled, fell down a hillside and picked himself up again, gasping and panting.

Twenty miles. He didn't have a chance.

He was clutching the gun he had grabbed from the guard. The butt was slippery with blood; he had struck the woman with it. For a moment he halted and stood listening and getting his wind, head cocked warily.

The patrol cars were fanning out, forming a broad circle around him. Behind, torrents of guards on foot poured

out after him. It wouldn't be pleasant when they caught him. Corith was dead. He couldn't live more than a few moments. And this time it was for keeps. Nobody could bring him back. The blood would be gone from his brain; tissue deterioration would have begun, before the cold-pack could be pumped back into the cube.

Parsons ran swiftly through the darkness, between the trees and tangles of vines that loomed up on all sides. He forced panic away and concentrated as calmly as he could.

Far to his right a line of multi-colored dots moved. A highway, connecting the various cities. Cars moved along it in brilliant clusters, on their way to the neutral area of the Government, the great globe that was the Fountain.

He changed direction and headed toward the highway. He was already getting winded. His body hadn't completely recovered from the crash of the prison rocket. His legs and loins ached from the leap off the balcony. He couldn't go much farther. It wouldn't be long.

IX

THE night breeze carried the faint crashings of men hurrying on foot. And the still more distant snarl of patrol cars. The cars wouldn't be of much use. They were confined to the roads. But they could let off guards at regular intervals. Pockets of armed men, spaced endlessly ahead of him, all the way to the city. Waiting for him the whole twenty miles.

He had no choice. He kept on in the direction of the highway, his gun gripped tightly.

He saw the four guards before they saw him.

They had set up a temporary barricade and were squatting behind it, heavy-duty rifles in position. The guns covered a broad swath of the woods in front and on both sides of them.

Parsons dropped and lay crouched,

getting his wind and analyzing his position. In the darkness, a few night animals scratched and skittered through the underbrush on their various errands. A twig snapped here and there. As Parsons lay hidden, the moon came out briefly, hesitated, then passed behind a cloud again. An owl hooted someplace off in the distance, his hollow tones mixing with the wail of the Manor sirens.

There were four guards—but they hadn't seen him. Just beyond them was the highway. Probably they had been let off by a patrol car and had scrambled down the bank to set up their barricade. The passing lights of the little drop-cars outlined them and their guns. Four youthful, coffee-colored faces. Tense and nervous. Gripping their guns and listening to each night sound, each rustle and slither.

Parsons crooked his left arm, extended his right in the cradle, closed one eye, and fired.

His first shot caught the barricade dead center. The wooden beams roared up in a crackling pillar of heat. Parsons leaped up and ran directly at the towering mass of fire that billowed across the ground and licked at the nearby trees. Dimly, he could make out the shapes of the four guards, retreating uncertainly from the flames, shouting at each other and trying to beat the fire off.

He reached the barricade, turned to one side and skirted past it, through the rim of the flames. The ground was burning underfoot. Bits of blazing debris rained down on him. He passed the corner of the barricade and opened fire point-blank at the four guards, who were trying to drag their equipment back out of danger.

One crumpled. The other three dropped their heavy guns and scattered. One of them was on fire. He ran in a frenzied circle, beating at his clothing and screaming. Parsons ignored him and concentrated on the other two. A bolt of energy from a hand weapon seared past him and cracked a tree into ash.

Swirling clouds of soot lapped on all sides, half-blinding and choking him.

—He dropped to his knees, fired, then crawled up the bank toward the highway. One of the remaining guards was moving in a wide arc with the idea of cutting him off. A single figure that leaped and jumped and hurried to get between him and the highway.

Parsons halted and waited. The guard climbed the bank and for a brief moment stood outlined against the lights of the passing cars. Parsons fired. Half of the man's head disappeared. The lifeless corpse tottered and plunged back into the vines and moist shrubbery. It lay, feet upward, one hand still gripping an energy tube.

Parsons emerged cautiously on the highway. Bright cars were moving everywhere, a dozen lanes of streaming, multi-colored traffic. Gray patrol cars were parked at intervals. The nearest one had already seen him and was grinding into life. It gained speed and headed directly at him.

Parsons ran out into the first lane, his arms up. He had perhaps thirty seconds—at the most. The patrol car was bearing down on him. Parsons moved into the second lane, into the buzzing, blur of lights. Horns honked, brakes screamed. Startled coffee-colored faces loomed up, swerved, skidded and raced on—

A yellow drop ground to a halt besides Parsons. "What's going on?" a yellow-robed youth demanded, eyes wide with astonishment. "For God's sake—"

Two of them. The youth behind the wheel and a small black-haired woman beside him. Snake heralds on their robes. Parsons tore the door open. "Get started."

"But—"

Parson aimed his gun directly at the woman's terrified face. "I know you wouldn't mind dying," he said grimly to the youth. "But you might miss her."

The youth hesitated a split second. Then the car jerked wildly forward. Parsons slammed the door and hung on

tight. At the same second the patrol car ballooned up and hurtled directly at them.

The youth swerved desperately. Parsons was thrown against the hull. A massive shape like a battleship filled the windows in front of them. The woman shrieked and buried her head in the youth's shoulder. The car twisted to one side and struck violently against the fender of the patrol car. The patrol car glanced off, spun away from the impact.

A car in the third lane plowed head-on into the patrol car. With a blinding flash the two cars locked together, caught a third car, a fourth, then tied into an endless procession of smashing metal and plastic, as the massed wreck rolled from lane to lane.

"Keep going," Parsons gasped.

The youth picked up speed automatically, his face glazed. The girl was unconscious, a limp bundle on the seat beside him, trembling with the vibration of the car.

"Don't stop for anything," Parsons said. "Not until we're on Government property. Not until we're in the city—inside the neutral zone."

DIRECTOR Stenog rose half-way from his desk. "Parsons! But the rocket was lost! Destroyed out in deep space!"

"The rocket never left Earth," Parsons shook himself loose from the white-clad Government guards. "It was pulled down ten minutes after it was launched."

Suspicion crossed Stenog's face. "We had a radarscope on it. According to the expert's report—"

"Shut up and listen," Parsons snapped. "And get these guys off me."

Stenog hesitated—then nodded to the guards. "Let him go. But stay here." He came around the side of his desk and faced Parsons warily. "What's this all about? It's obvious you escaped. But I can't understand why you should come back here. It doesn't make sense."

Parsons told him.

When Parsons was finished, Stenog had turned sickly white. "I don't believe

it," he said flatly. "Loris is the most valuable contributor to the Soul Cube. By herself she's raised the stock to a new level. And her predecessor, Jopthe. And before her Nixina—" He broke off. "Mother. Grandmother. But it's not possible! They've put so much in—"

"And taken out," Parsons answered. "Everything they put into the Soul Cube is kept under their control. Each zygote is watched. When it's born they bring the person to the Wolf Manor. You think they're enriching the stock, but you're wrong. Their seed never mixes with the rest of the stock. They keep it separate."

Stenog's ashen face twisted uneasily. "It's possible, of course. Each zygote is marked. It would be possible to follow individual zygotes through. But I—"

"Corith said they planned to destroy the Fountain system as soon as there were enough of them to take control. Without the Soul Cube, the human race would die. Aren't all male gametes stored there? Isn't the supply at the Soul Cube all that exists?"

Stenog nodded slowly. "The supply of male gametes was laid up a century ago. Since then, all males have been sterilized at birth. If something should happen to that supply—" Abruptly Stenog broke off.

"What was it?" Parsons demanded.

"You say Corith is dead. Then *they* have no male gametes. If they destroyed the Fountain there'd be no male gametes of any kind—it would mean the end of all of us. Themselves, us, everybody!"

"How many zygotes exist in the Soul Cube?"

"Four hundred billion. Enough for two hundred generations. Six or seven thousand years." Suddenly Stenog relaxed. "We could obtain male gametes from any male zygote. All we'd have to do is allow a male zygote to continue its development and be born."

"If they destroyed the cold-pack envelope how long do you think your four hundred billion zygotes would last?"

Stenog's youthful face showed shocked

disbelief. "You think they'd destroy the human race, knowing none of their males is fertile? Knowing there'd be nothing to come after us? Themselves, or our own?"

"Corith thought so," Parsons answered.

For a moment Stenog hesitated. Then he touched a button on his desk. "All right, Parsons. The Fountain is alerted. By the time we're there, the Soul Cube will have been sealed off." He pushed past Parsons and out into the hall. "Let's get going. I want to see for myself if something is *really* happening."

Certer met them at the entrance to the great chamber within the Fountain. "What's going on?" he demanded. "The Soul is closed off. They won't let us through."

"The Fountain is preparing for an attack," Stenog answered. "I've ordered the Soul Cube sealed tight."

Certer's jaw dropped. "An attack?" He hurried after them. "What's happening? For God's sake, is some kind of attack going on? Are we in danger?"

STENOG ignored him. "It will take days," he said to Parsons, "to check your story. Records will have to be gone over carefully. Papers and tapes minutely examined. If it's true that mutant zygotes exist, we may eventually have to wait for—"

"Mutants!" Certer gasped. He looked quickly from Parsons to Stenog. A glint of understanding passed over his features. "Have we been raising children not our own?"

"There's a bird that does that," Stenog said, half to himself. "Lays its eggs in other nests. When its young are born they push the genuine brood over the side." He turned to Parsons. "You're about to see an unusual thing. The Soul Cube is in the process of separating into a sealed-off fortress. Even if the Fountain is taken, nothing will get across into the Soul Cube."

They had come to an observation platform at the side of the chamber. Stenog

halted. And pointed.

Everything had been cleared from the vast chamber. The machinery, the robots, the working men, the endless heaps of equipment, were gone. The chamber had become a barren space, utterly empty, separating the Soul Cube from the globe that contained it. Its energy tubes had emerged, a line of hollow muzzles the length of the gleaming metal wall. A sheer cliff of death rising up at the far end of the bare chamber.

"Nothing can cross that space," Stenog stated. "Nothing can get from here to the Soul Cube."

"How about the other sides?" Parsons asked.

"Watch."

Something was happening. For a moment Parsons was puzzled. Then he understood.

The great Fountain Globe was coming apart. The immense sphere was dividing into sections. Each section was separating. Even as he watched, the numerous points of tangency was severed.

RAPIDLY the Soul Cube was being isolated. The structure of the Fountain was about to be sacrificed. Under the ground surface, powerful force-fields were applying growing pressure on the segments of the globe. Gradually, with a low rumble, the segments came to rest, spread out, lying flat on the ground away from the Soul Cube. Like an orange that had been peeled, the Soul rose up in the center of a ring of flat fragments. Scattered pieces on all sides of it that had been the massive Fountain. The Soul Cube gleamed and flashed as its energy tubes moved into position. The lights of the city outlined it, a solid block of steel jutting up from the ground.

"There's no way it can be approached," Stenog said.

"Can we get into it?" Parsons asked.

"They'll pass me." He became suspicious. "Why? Better to stay here. I want it completely sealed off. I can contact the control turrets and have one of the locks opened, but—"

"Contact them," Parsons said. "I'd prefer to be inside the Soul Cube. Not standing out here looking at it."

Stenog eyed him. Then he grunted. "All right. I've gone this far with you." He raised his hand and signalled. "The tubes have been sighted on us since we came."

Parsons blanched. "You mean if it hadn't been you—"

"We're well within range. There—the lock is opening. Come along."

They raced across the open space toward the wall of the Soul Cube. As they approached it a circular doughnut slid to one side. Stenog hurried inside, Parsons close behind. The lock slammed shut instantly.

They were inside. A silent corridor stretched off and was lost in an intricate maze of passages. Stenog wasted no time. He hurried up a ramp and onto an observation platform. Parsons followed him.

It was strange, being inside the Soul Cube and looking out. A narrow view-slot showed Parsons the broad strip of barren ground on all sides of the cube. Seeing it from within, he could believe the cube was safe. Visibility was perfect. Nothing could approach unnoticed by surface or air. The Fountain globe had been laid flat. There was nothing obstructing vision for half a mile. Beyond the barren swath the city itself rose, brightly-colored spires and webs that glittered and winked in the evening darkness. Moving dots of light that were cars.

"Nothing will get across," a white-robed officer said. "It's impossible."

The platform was crowded with military men. The cube garrison had come up from the subsurface levels to prepare for the attack.

"Any sign of anything?" Stenog demanded.

"No unusual activities," the commanding officer answered. "The city is fairly quiet. The collapse of the Fountain has been noticed, of course. There has been some comment."

"No sign of any organized movements? Any groups forming?"

"None," the officer answered. "We have good taps on the city. We'd know if there were anything forming."

Stenog glanced at Parsons. "Nothing. What do you say to that?"

Parsons addressed the officer. "When did your last report come through?"

"A visual report. Within the last few minutes. Loris brought it."

Stenog choked. "*Loris?*"

"When she came over. Just before, the alert. She said everything was going exactly as expected."

X

PARSONS was the first to get there. He bowled astonished Government troops out of the way and reached the interior of the Soul Cube. Tunnels and compartments deep within the cold-pack. A constant hum of machinery. Pipes, moist floors, low-ceilings and flickering lights. With Stenog right behind him he entered the control-office from which the zygotes were taken to the artificial wombs that made up the lower levels.

Loris greeted them quietly. She was sitting at one of the long analysis tables, among the delicate meters and instruments that measured and maintained the cold-pack. "I wondered when you'd get here," she said to Parsons. As an afterthought she added: "I left the Manor as soon as Corith died. I came by air."

She showed no emotion. Her handsome face was blank. She sat at the table with her hands folded, fingers interlocked. She seemed preoccupied. As if she were listening to some faint inner voice, a voice none of the others could hear. She had thrown a traveling cloak over her gray robe, an ankle-length mantle of heavy metal foil that became a cowl over her dark mane of hair.

"So Corith is dead," Parsons repeated.

Loris glanced up. "Oh, yes. Almost at once. We had no way to stop the blood." She was holding herself carefully, her

powerful body under absolute control. For a time she sat in silence and then continued quietly: "His own heart had never resumed beating. As soon as the mechanical unit was gone, he perished. He wasn't able to live even a moment without it."

"Loris," Stenog said, "then this is true?"

She nodded. "Yes, of course."

"Jepthe is your mother?"

"Yes."

"And Nixina! I can't believe she's alive. My God, she's a legend!"

"Nixina is deaf and blind. She's a century old. We are longer-lived than you, apparently."

Parsons edged forward. "Loris, there are no male gametes left?"

"Of ours? None. All have been already formed into zygotes. We have no supply. They didn't expect him to die; they never knew why or how. It was only today we learned he had taken his own life. If we had known—"

"Do any of the zygotes remain in the Soul Cube? Or have they all been born?"

"Some remain in the cube. Perhaps a dozen."

Stenog and Parsons looked at each other. "What becomes of them?" Parsons demanded tensely.

Loris held a small bit of paper between her folded fingers. She laid the paper on the table thoughtfully. "This tape," she said, "is the code record of the dozen zygotes that are ours. A dozen out of four hundred billion."

She reached over and dropped the tape into an automatic disposal slot. The tape flashed bright red—and was gone. Dissolved into free energy.

"There's no record of the code positions in my mind," Loris said. "The psych-tap won't be of any help. I've never allowed myself to look at the tape. I've been very careful."

"Was that what you came here for?" Stenog asked hoarsely. "To destroy that tape? Nothing else?"

"Nothing else. The tape was hidden here. I wanted it destroyed. There was

always the chance you'd go over every atom of the control offices. I wanted it safely out of your hands."

"Why?" Stenog demanded.

LORIS smiled. "So our zygotes could never be separated from the common horde. So they could never be found. One dozen—out of four hundred billion. We had been moving them ahead. They were near the exit compartments, about to pass from cold-pack to the embryo stage. But now I've restored them to random positions. I did that while I waited for you. It's amazingly easy to lose twelve zygotes among four hundred billion like drops in the ocean. But they're not really lost, are they? They'll appear from time to time during the next forty centuries."

Stunned silence.

"We lost," Loris continued in her thoughtful, husky whisper, "when Corith died the second time. There was no hope after that. With Corith, perished all our dreams and plans. Those of us who remain will live out our lives and then quietly die. We will be gone from the Earth. And there will be none after us." She gazed up intently at Parsons and Stenog as she touched her finely-chiseled temple with her long fingers, a gesture of graceful intensity. "That is, none—until the first of the dozen is born."

She sat calmly, touching her dark hair, pushing it absently back from her face. Her luminous eyes glowed. Her whole face shone with a steady fire that rose up from deep inside her.

"I think there are a dozen," she added. "Perhaps there are actually a few more than that. Let's say, of ours, there exist a dozen—*plus*."

PARSONS stood in the warm sunlight, watching the multi-colored crowds surging along the sidewalks. The fast-moving drops that filled up the streets. The fragile webs that ran glistening from spire to spire.

"Nice, isn't it?" Director Stenog said.

"Very." Parsons shrugged wryly. "I wish I had a place in it."

"Strange. In your society your role as a doctor was of great value. Yet the same role in our society is dangerous. By healing Corith you set into action a chain of events which may eventually destroy us. Sometime within the next four thousand years, as Corith phrased it."

"What did you do with her?"

"Loris? Sent to the penal colony on Mars. All of them. All the sisters and brothers. And the two old women." Stenog shook his youthful head. "I saw her with my own eyes. Nixina. A century old. I looked it up in the records. A hundred years! They'll be on Mars a long time."

"What do you think will happen when the dozen plus are born?"

"I don't know. Maybe they won't identify themselves. Maybe they'll live out their lives without knowing. In the service of mankind, contributing their produce and ability—and finally die. Or—"

"Or construct a revolutionary organization and try to wipe out all human beings."

"Only time will tell." Stenog considered. "You know, Parsons, if I was sure it would be toward the end of the four thousand years, I'd feel better. By that time we may be a match for them. But I'm afraid some of them will start showing up soon. Next year. Or in the next ten years. We won't know. Every time an exceptional person arises we'll suspect him. Every time somebody shows unusual ability we'll have to remove him and shoot him off to the penal colony. It defeats the whole purpose of the Lists—the whole Fountain system. It undermines everything!"

"Maybe," Parsons said, "you'll have to give up the Fountain system and go back to normal reproduction. Unify reproduction and sexual intercourse into one act."

Stenog shot him a quick glance. "Perhaps. You may be right." He pondered moodily. Then a thought came to him.

"Well? Have you decided?"

"About going back? Yes, I've made up my mind."

"I can see. You want to go back."

"I have a place there. Here, I'm useless—harmful, in fact. Alice through the looking glass. Everything in this world is reversed, inverted. Turned upside down."

"I hope we can make good continuum contact. The dredge isn't accurate—the history labs developed it to salvage records and materials. But we'll do our best."

A gust of sweet-scented air blew up in Parsons' face, bringing with it a sudden murmur of voices from below. A golden hum from the city of shifting lights, dancing spires and webs. The Fountain globe had been restored. It glowed and shimmered as before. The nucleus of the city was functioning again. Drops of color that were cars sped to it in swarms, darting through the crowds of youthful men and women in their gay robes.

AGAIN, the yearning ache came up in his throat, the pain he had felt when he had first seen it. Seen it in the night, glowing like a cut jewel against the sky. When his body had been shaken by the intense hunger, the overpowering desire to unite himself with it, to make himself part of it.

But it wouldn't work. He had no part here. His place was in his own world.

Parsons turned abruptly away. "Let's go. I want to get started before I do any more harm."

"Wait." Stenog came after him carrying something awkwardly. "Don't forget *this*. It belongs to you."

He set down Parsons' gray-metal instrument case.

"We gathered up as much of it as we

could find," Stenog said, his smooth face breaking into a proud grin. "Some parts had been lost. A lot was damaged when our teams broke into the Manor. There was considerable fighting. But we did our best. We thought you might want it. We have no use for it, of course."

Parsons picked up the instrument case slowly. For a moment he stood holding it. "Thanks," he murmured finally. "I hope *I* can find a use for it—wherever the hell the time dredge lands me." He moved off slowly.

"Yes," Stenog agreed. "Let's hope you'll be able to fit in someplace." He moved along with Parsons, wondering if there weren't something more he could say. Something encouraging. After all, it wasn't Parsons' fault he didn't fit in. Stenog felt a great glow of magnanimity sweep over him. He put his hand on Parsons' shoulder. "There's really an amazing range of cultural variation. You should be able to find numerous societies where your function is valued."

"Good God," Parsons answered. "I want to get back to my *own* society. Not just any."

"Of course. I understand. Your friends, job—"

"Job, hell. I've got a wife."

"A wife!" Stenog jerked his hand away as if he'd been burnt. His youthful face flushed deep scarlet. "Yes, I suppose so. Now that I think of it . . ." He stopped walking and fell behind, magnanimity turned to disgust and embarrassment. He didn't look directly at Parsons. "A wife. Well, almost any kind of society can exist. Almost any system of morals."

Parsons smiled a little and gripped his gray-metal instrument case more tightly. "Just about any. I guess you sort of have to take the broad view of it."

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ANSWERS TO QUIZ ON PAGE 67

1-g, 2-e, 3-k, 4-f, 5-j, 6-i, 7-c, 8-l, 9-a, 10-h, 11-b, 12-d.





"You've got a key to all the secrets of history."

PROCESS SHOT

By SAM MERWIN, JR.

*No wonder the Revolutionary
War movie was good—the
cameraman was on the spot
when it happened.*

THE installation was finished. Dr. Moorhead sat in an absurdly comfortable oyster-white leather armchair behind the immense blond satinwood desk that was his badge of office as president of Colossus Tri-Di Vidar Pictures, Incorporated—more generally labeled

CTV—and wondered what in heaven he was supposed to do to earn his immense salary.

He asked the question of Marlin Zandor, intense, fluid-featured, prematurely white-haired general manager of the studio, who had just guided him through the formal inauguration of a luncheon at which actors, executives, columnists and public relations experts had largely ignored the *filet de boeuf* Wellington and Moët Chandon in favor of the still and vidar cameras that had flashed and ground through the festivities and speechmaking.

Zandor's quick one-sided smile, though sardonic, lost none of its supple charm. He said, "Willis, when a man has attained your eminence and fame, and has managed to retain a reasonable semblance of physical health, he becomes a prize to be competed for in the open market."

"Good God!" exclaimed Dr. Moorhead, to whom, in the course of sixty-three full and active years, the idea had never occurred.

"Surely self-evident truth is not shocking to you," said Zandor straightforwardly. "If you do nothing more than appear at a dozen good-will engagements a month, you'll be more than earning your keep. You're a triple-threat front man—a historian, a university president, a former ambassador. We're counting on your prestige to cause the great adult audience we seem never able to get, to install vidar sets, or to turn theirs on when CTV productions are on the air. It's part of the mature productions program we're embarked on. You saw the rushes of the John Andre epic last night."

Dr. Moorhead nodded but was not able entirely to restrain a wince. He said, a trifle plaintively, "But do you have to ring in that love plot? Surely, what we know about the relations between Andre and Benedict Arnold's wife, following the winter when the British held Philadelphia, would have been enough."

ZANDOR shook his white head emphatically and slid off the corner of the desk. He stood in the center of the deep-pile carpet, hands thrust carelessly into the pockets of his \$100 slacks. He said, "Willis, the truth is great—we use it whenever we think it will sell. But in this instance, it doesn't allow for the love interest we've got to have."

"I see," said Dr. Moorhead, who saw all too clearly. He added, "Still, it seems a shame, when your background material—your settings—are so historically perfect."

"That's where we try to do an educational job," said Zandor with a flicker of pride. "Our backgrounds are accurate. And, by making them so, we do help people to get a sense of the past in a picture like this one. But, if we didn't give them stories they wanted to put money on their monthly bills to see, we'd be wasting it entirely."

He paused, added, "Good luck—and gladder than I can say to have you with us, Willis. Mrs. Zandor—Alice—hopes you'll have dinner with us tonight. Seven o'clock—no black tie."

"I'll be delighted," said Moorhead. When Zandor had left, he picked up a phone, told the honey-voiced female who answered that he would be taking no calls for the next two hours.

He didn't want to talk to anyone. He wanted to think. Yet, when he marshalled his thoughts, he found them unbearable. For, almost before he was launched on what had seemed to be his greatest opportunity, he was caught in the pattern again.

It was a much too familiar pattern. When, a young man whose sheepskin was still fresh, he had begun teaching American history, he had done so with the joyously serious intent of teaching his students to avoid future mistakes by revealing to them the tragic errors of the past.

And had found himself battling a weighty body of alumni and faculty opinion, that had decried him as unpatriotic for distorting the fairy stories

of history most of them had been taught as truth. That had been during the nervous Cold War era which followed World War Two.

Years afterward, when his definitive *Traitors and Assassins of United States History* had been published, he had found himself decried by press and pundits alike for destroying the fabric of American idealism.

And, as ambassador—but that was too recent, too painful to contemplate in the light of his latest disillusion.

For, as President of CTV, he saw all too clearly that he was again to be hamstrung in his efforts to help humanity face its future bravely through knowledge of its past.

He decided to take a walk around the studio grounds.

It became quickly evident, once he had slipped out the side door of his own sanctum sanctorum, that, despite the intense publicity campaign that had, for more than a week, been wringing the last ounce of exploitation out of his appointment as President of CTV, he was virtually a stranger on his own lot. In his formal luncheon attire, he seemed to be accepted generally as some sort of dress extra or character actor.

Though he had commenced his stroll with no conscious destination in mind, Moorhead found himself adapting one in self-defense.

WHILE watching the rushes of the André-Arnold epic, the night before, Moorhead had found himself intrigued by one background stretch, which had showed a view of No. 1 Broadway, Sir Henry Clinton's Headquarters in New York in 1780. In more than one way, it was a remarkable shot—for, while giving an impression of absolute historical veracity, it had shown the stone stairway of the entrance facing north, rather than south, which was not in accord with such period shots as Moorhead and other historians had viewed.

It was not important, but the detail

bothered him. He decided to find out the why of this seemingly unimportant fact. Besides, he did want to see how the studio managed to obtain such remarkable results, in regard to its historical backgrounds if not its scenarios. He asked a lot patrolman, was directed to a low concrete building a quarter of a mile away.

On its door it bore the gilt legend *Library and Research*, and its contents, while both interesting and impressive, proved disappointing. Its research seemed to be largely taken up with costume study, its library to consist of neatly stacked and filed cans of film.

"Process shots," said the pallid young attendant ushering him around. "One of our directors wants a scene laid in Sarawak or Moscow or maybe Kamchatka. We got 'em here, sir. CTV has camera crews out all over the world, at all times, getting background footage. If we haven't got what the director wants, we get it for him, sir."

"I see," said Moorhead, who understood the photographic process of putting a studio-photographed foreground against a "real" background. "But what about your historical pictures? Where do you get the background shots for them? Surely you don't rebuild every set you need on the lot here. The expense . . ."

The attendant frowned. He said, "Sure we build 'em. Take a look at the back of the lot if you don't believe me, sir."

"I'm not questioning your truthfulness," said Moorhead. "But in this André picture, I believe, you have managed a reconstruct—"

"Oh!" The attendant's frown faded. "Miniatures and Models has come up with something special for that one, according to the grapevine. It's all very hush-hush, but I guess it's okay for you to know about it, sir."

"I guess so," said Moorhead. "Where do I find this—Miniatures and Models?"

It proved to be another low concrete building, not far from Library and Re-

search. Inside, it was echoing, gaunt, empty.

Moorhead walked the concrete floor of an immense room until, at last, he reached a barricade, built across the far end of the long room—a steel barricade with a wooden door. Through this he heard sounds of life. He knocked, got no answer, knocked again.

"Come in!" roared an annoyed male voice.

He went in.

Two men were inside, playing gin. Both wore sports shirts and definitely undress slacks, but there any resemblance ended. One, the one who had yelled at Moorhead, was immense, dark and hairy. The other was little, wiry and wore gold-rimmed spectacles. He said, "Well, now you're in here, what is it?"

On the table, pushed to one side, were a pair of automatic pistols in discarded shoulder holsters.

"I merely had a question to ask you gentlemen," said Moorhead. He introduced himself.

HIS reception was irreverent. The two men stared briefly at one another, then the big hairy one said, "Sooner or later, we get 'em all in here. What can we do for you, Doc?"

Instead of feeling taken aback, Moorhead was delighted. Here at least, on the CTV lot, was humanity, brash and unafraid. He said, "Amongst other things, I'm by way of being a historian. I saw your yesterday's rushes last night, and I'm interested in where you picked up your information about the steps in front of One Broadway. In every print I've ever seen, they pointed the other way."

The little man said, "Sir, I'm glad to meet you. I was at Eastern while you were President, but I don't guess you'd remember me. And that book of yours—the big one—it's been a big help to us in this job we're on now."

"You mean *he* wrote the book?" the big man asked incredulously. Then, to

Moorhead, "What's the idea of flapping around here making noises like a studio boss? Draw up a chair and squat."

Moorhead sat down. He said, "You know my name." And, nodding at the hairy one, "May I ask yours?"

"Larz Johanssen," said the giant. "CTV's secret weapon. This is Maury Faylen, Doc. He rates as CTV's secret sorrow."

"Quiet, you freak," said the little man. And then, to Moorhead, "What can we do for you, sir?"

"He wants to know what makes Clinton's doorstep point north instead of south, you idiot," said Johanssen. "You're the brains of this outfit—by your own admission. Tell him."

Incredibly, Faylen looked dismayed. He opened his mouth to speak, closed it, gulped, then blurted, "Because that's the way it points, sir."

Moorhead smiled and said, "I'll accept your word for it, Faylen. But how did you find out?"

There was another long hesitation. Then Faylen said, "You're really the new president of CTV, sir?"

"Don't you ever listen to the news on your own box?" the giant asked. "Sure, he's the new president." And, to Moorhead, "How'd you happen to dig us out so quick? Old Mother Zandor tip you off?"

"Not yet," said Moorhead. "I merely got curious about that doorstep."

"See?" said Johanssen. "Build a better doorstep . . ."

"Okay," growled Faylen. "But we didn't *build* this one—all we did was take pictures of it."

"How?" Moorhead put the question swiftly.

His new friends exchanged another long look. Then Faylen said, "After all, he is the president." Johanssen shrugged immense shoulders.

He said, after looking at a gold-strapped watch on a hairy left wrist, "Okay—it's time we got to work anyhow."

Both men got up and began to strap

on their shoulder holsters. Looking mildly apologetic, Faylen said, "Damn things are a nuisance. But we aren't allowed to take chances."

Wondering, even a little afraid, Moorhead followed them through another door—which Johanssen carefully bolted behind them—down a flight of steel steps, to a sort of subterranean concrete vault. In its center, focus of a multitude of heavily insulated cables, stood a steel cabinet, about ten feet high by eight feet broad and deep.

FAYLEN checked a complex of dials and gauges mounted on one of its walls, while the ebullient Johanssen explained. "It's the strangest thing, Doc. If we'da known what we were getting into when we started it, we'd have dismantled the whole business. Since we got it operating, we can't call our souls our own."

"What is it?" Moorhead asked, increasingly puzzled.

"We call it the cockalorum, because we can't think of anything else to call it," said the hairy man. "It started out to be a special wireless transmitter for vidar news flashes from all over the world—an instantaneous transmitter. It was meant to give CTV newsreel the jump on Pathé and the others. Maury here"—with a nod at Faylen—"was supposed to be the white-haired genius that was gonna do it. Instead, he ties a sodium fission reactor to a time clock and comes up with this."

"I don't wish to appear unnecessarily stupid," said Moorhead, "but what does it do?"

Faylen finished checking the indicators and said, "Okay—she's ready now," to Johanssen, who began to unfasten bolts on a door in the cabinet. He said, "I guess you could call it a time machine. Anyway, that's what we've been using it for."

Moorhead hesitated a moment before entering the strange device. He had heard of the long tradition of Hollywood practical jokes, and half-expected,

upon entering, to be doused with water, have most of his clothes removed by a group of rough and willing chorus girls, or find Marlin Zandor awaiting him, dressed as Abraham Lincoln or some such outlandish fancy. Certainly, Faylen and Johanssen seemed ideal types for practicing japery of this sort.

However, upon entering, he found himself wondering, while the bigger man carefully locked them inside, if he hadn't let himself be trapped by a couple of lunatics. He pulled a handkerchief from his breast pocket and began mopping a suddenly moist forehead.

But his hosts were no longer clowning. Johanssen had stationed himself beside what could only be some sort of highly complex camera, while Faylen—after motioning their guest into a rear corner—got busy with another board covered with such an intricate series of gadgets that it reminded Moorhead of a jet-bomber dashboard.

The little man said, without looking over his shoulder, "Roll her, Larz." With which, as the camera began to hum softly, he pushed a combination of buttons that caused the front wall of the cabinet to become transparent. "Polarized molecular screen," he muttered by way of explanation.

"I'll be damned!" said Moorhead, overwhelmed at the enormity of the spectacle suddenly before him.

From a frame of rubble, he was looking West across Lower Broadway at a panorama of Revolutionary Manhattan after dark.

To his immediate left were ruined houses, relics of the great fire of 1776 which—a few days after the British occupation—had reduced to charred ruins much of the lower eastern section of the city, then jumped Broadway further uptown and ravaged the western part of town. Beyond, also to his left, rose the bastions and apron of Fort George, defender of the lower island from the times of the early Dutch settlers to the post-Revolutionary Federalist era.

Beyond it the Battery fell away to

a harbor a-twinkle with the rigging lights of British men of war, and transports and supply ships at anchor in the Upper Bay. Immediately in the foreground was a partially fenced oval that could only be the Bowling Green. Beyond it, across the street, rose the red brick elegance of Mrs. Lorin's, at No. 1, and its not quite as impressive neighbor at No. 3. To his right Moorhead could make out the fire-damaged spire of the original Trinity Church.

"How about it, Doc?" Johanssen whispered softly. "Does she point north or south?"

THE steps in front of No. 1 indubitably pointed uptown. But Moorhead was too overwhelmed to do more than nod agreement. For, little by little, his senses were forcing his reluctant brain to accept the fact that what he was looking at was real.

First, of course, his eyesight was dominant. He saw, in a matter of minutes, a profusion of uniforms. He saw red-coated sentries on duty outside No. 1, permitting passage of a cluster of gray-surtouted Guard officers inside. He saw heavy-booted Anspacher foot chasers in dark green jackets, jack tars with broad-brimmed hats, Hessian grenadiers with candle-waxed mustaches. Frowzily bundled, drunken daughters of joy were making their way to and from the Battery, their historic place of local assignation.

His ears contributed unassailable evidence to add to the reality his eyes revealed to him. He heard English spoken in a variety of accents to rival those of contemporary Times Square—all of them alien. He heard the curses of German auxiliaries, the high-pitched voices of women, the clatter of iron hoofs on cobbled pavements.

Nor did his nose play his other senses false. For the medley of odors that assailed his nostrils did not belong in any Twentieth Century American town. It was composed of pigs in the street, of unwashed dogs and unwashed peo-

ple, of manure, human and animal—and above all, an overpowering, acrid smell of burnt brick and wood and plaster from the rubble of the unreconstructed town.

And, at last, he felt cold—for the polarized barrier seemed far from weatherproof. He turned, aware of his discomfort, and saw that his companions were also shivering. He folded his arms tightly, Johanssen did something to a button, and the picture faded.

"New York was cold in November then," he said, as the lights in the cabinet attained fluorescent brilliance. "Forgot we weren't shooting the summer scenes yet. Hold on a moment."

He worked the locks and left the cabinet. Moorhead turned to Faylen, who said, "Got some good footage of the ships in the harbor. They'll make good process shots for next week's shooting."

"Good God!" cried Moorhead, stung by his companion's matter-of-factness. "Don't you realize what you've got here, man?"

"I should," said the other. "We had enough trouble getting this spot. Do you have any idea what a trick it is to get a safe camera location when and where you want it?" And, when Moorhead simply shook his head, "First, we have to prepare a phantom—that's what we call an electronic mockup of our cabinet. And when we've got it right to contain what the studio wants it to hold in the way of cameras and gadgets, we've got to expect them to want it bigger.

"Next, we've got to locate it temporarily," he went on complainingly. "And that only involves messing around with a few hundred light-years in space as well as time—stuff we have to do by the seat of our pants. Then, when we find our time, we've got to give our phantom a hook—so it'll stay put and not give us a picture of Mars or Halley's comet or something we don't want.

"Then, we've got to latch it onto some spot where it won't be spotted—and believe me, that takes a lot of do-

ing. Usually we find out we've got the whole cabinet pointing east instead of north, or something. Then we've got to pray we've actually got what we want, and that research doesn't have us hunting the wrong people in the wrong time. And are those babies ever wrong!"

STOP squawking, 'featherhead," said Johanssen, re-entering the cabinet with an armful of heavy coats. He handed one to Moorhead, told him, "Get into this or you'll freeze your ears off, Doc."

Struggling into it, Moorhead said, "But, for Pete's sake, you two, don't you realize what you've got? With this incredible invention of yours, you've got the key to all the secrets of history. With it, we can *know* what happened. We can discover if Nero was really the tyrant history calls him, or was smeared. We can get the truth about Ben Bathurt's disappearance. We can see the missing plays of Shakespeare being actually performed at the old Globe Theatre. We—"

"It ain't that easy, Doc," said Johanssen. "Sure, with luck and a lot of time, we could locate some of those things. But it would take some doing. And unless Zandor says the studio needs it, who's gonna pay the bills? We've got a good thing here. We don't want to louse it up."

Moorhead didn't bother to argue. His dream, his so often shattered dream, was alive once again. The vistas opening up before him, thanks to these two rough-and-ready geniuses and their invention, were too splendid for speech. He looked at the blank wall less than a foot in front of him and thought that, if cold could get through from outside while it was in operation, there was nothing to prevent him from stepping through the other way.

There was nothing but his own fear to keep him from walking the dung-laden streets of Revolutionary New York!

He must have made some involuntary motion, for Faylen said quietly, "Don't try to get through the gate, sir. There's no telling whether we could get you back. You'd be hung as a spy, for sure, if some of those Hessians caught you. They're really mean bastards."

"Of course not," said Moorhead, with what he hoped was dignity rather than stuffiness.

Again the wall in front of him seemed to dissolve. And again the incredible panorama lay stretched before him.

It looked almost exactly the same. But behind him, he heard Faylen say in a low voice, "What's the lag lapse, Larz?"

"Eighty-eight minutes," replied the other softly.

And by the moon, by the cessation of street activity, it seemed later. For this was, after all, an occupied city and—save for patrols and soldiers on duty—few were abroad in the near-darkness. He watched a squad of German soldiery tramp past with the heavy boot-tread that, since the Thirty Years War, has been a hallmark of the infantrymen from across the Rhine.

Then, suddenly, the front door of No. 1, across Broadway, was flung open, revealing an orange rectangle of candle-light. A number of surtouted figures appeared. Voices sounded, goodnights were said, an order or two was given. Two officers mounted horses and trotted off up the street, their beasts' hoofs striking sparks from the cobbles.

One figure, stocky within its outer wraps, and walking with a profound limp, moved off alone toward the doorway of No. 3, where, after crossing the alley between the two houses, he turned in. In the grip of near-unbearable excitement, Moorhead turned to ask, "Tell me, what's the date of this scene we're watching?"

It was Johanssen who answered. "By the old calendar, it's the fourth of November, 1780."

"Then that," said Moorhead, pointing toward the limping man, who had

paused in the doorway of No. 3 to glance back the way he had just come, "must be Benedict Arnold."

"Could be," came the appallingly disinterested reply. "He was operating in these parts about then, according to the dope we got."

GOOD heavens!" Moorhead exclaimed softly. It was physical anguish not to step through the barrier, not to cross the cobbled street and confront the man whose name, honored until six weeks earlier—when his treachery had become known—had become an American synonym for *traitor*. Despite all that was known, all that had emerged from diaries and memoirs and correspondence, how much of his story remained to be told! Moorhead's nails actually dug into his palms.

A whisper of alarm from behind him brought Moorhead out of his rigid abstraction. A man had slipped out of the alley, a tall man wearing the green greatcoat of a Tory regiment. Crossing Broadway directly toward them, he paused, seemed to listen, then moved swiftly closer, to an obligato of Hessian hobnails coming nearer. For an instant a shaft of moonlight revealed saturnine features, with sunken eyes and a long, powerful young mouth and chin.

He flattened himself against the invisible barrier that separated him from his watchers, seemed to push almost through it, as the Hessians appeared on their return patrol toward the Fort and Battery and spied him there. A shouted "*Achtung!*" made the night raucous.

Moorhead couldn't help himself. Acting instinctively, he thrust an arm through the barrier and, despite cries of alarm from behind him, pulled the green-coated man into the cabinet. There was an instant of intense, unbelievable cold, as his arm bridged the gap between centuries, and then passage had been made.

A stunned American was gaping at

his rescuers while, outside, a startled and discomforted Hessian non-com poked in vain at the barrier and tried to discover where his quarry had vanished.

Johanssen said, "Now you've done it, Doc. Get him out of here quick—if you can."

"Just a moment." Moorhead assumed command. He turned to his stunned captive, said, "What's your name?"

There was the full authority of a university president, of a former ambassador, in his voice. For the other said, without pausing to reflect, "Champe, sir—Sergeant John Champe, of London County, Virginia, sir."

"I'll be damned. I thought it had to be you!" said Moorhead.

"Who the hell is it?" Faylen asked. Both he and Johanssen, Moorhead noted, had drawn their automatics and were holding them ready.

"Sergeant John Champe," murmured Moorhead. "Sergeant major of Lighthorse Harry Lee's Legion, on special assignment. Men, this is the fellow who faked desertion and joined Arnold's legion last week to arrange the kidnaping of his new chief. Right?"

Steel-strong fingers encircled Moorhead's throat, deep-set fanatical eyes burned into his own. "You just spoke your own death warrant, whoever you be," said a soft Southern voice in his face.

Faylen, moving swiftly and silently, broke Champe's stranglehold by chopping the barrel of his gun down hard on the sergeant's wrists. He said, "You got no business in here, fellow. If you know what's good for you, you'll get back out there quick."

Moorhead's mind was beginning to function at top speed. Yellowed pages of history and document floated before his mind's eye. This was November 4th, 1780, and this was John Champe, and across the street was Benedict Arnold, just returned from a council of war with Sir Henry Clinton.

Furthermore, on the far bank of the Hudson—this night and for several nights to come, unless journal and history lied—Major Lee, with a small escort and three saddled but riderless horses, was waiting in the Hoboken woods for a rowboat containing Champe, a helper, and the bound and gagged Benedict Arnold. His purpose was to return the traitor to Washington's Headquarters up the river, for trial and punishment.

BUT this night, this November 4th, was the night the conspiracy went awry. For, at the meeting from which Arnold had just come, it had been decided that the traitor and his Tory legion, along with Phillips's brigade, should embark the following day for the Virginia Capes, there to campaign in support of Cornwallis further south.

It was Champe's final chance to reverse history.

Moorhead gripped his shoulder, said, "Never mind who I am—except that I'm a friend." You've got to carry out your assignment tonight or it will be too late. You'll need help to get past this Hessian patrol. Here!"

He snatched the automatic from Faylen's surprised grip, thrust it into the surprised Champe's hands and said, "Just pull the trigger. It will fire ten shots."

And he pushed the tall Virginian back through the barrier.

There was the sound of a brisk scuffle, then the barrier was again opaque and the fluorescents were again on. Johanssen and Faylen, with a fine disregard for Moorhead's rank in the studio, were assailing him verbally.

"You loused up a lot of good footage," said the big man angrily. "Getting sentimental over that jerk. What was he—an ancestor of yours or something?"

"Maybe," said Moorhead quietly, "he was an ancestor of all of us in his way."

"He must of had a lot of busy days," said Faylen. His dextrous, experienced

fingers were busy with the gauges, while Johanssen was opening the door. He said, "I'll have a hell of a time explaining that lost artillery to the props department."

"I think I can cover that for you," said Moorhead. He walked on out of the cabinet and removed the heavy coat Johanssen had given him, discovering that he was sodden with sweat. Yet the triumph he felt at what he had seen and done overmatched any physical discomfort.

Furthermore, now that it was over, his hosts seemed to have lost the edge of their anger. Johanssen, shaking his curly head, said, "You can't afford to get too enthusiastic with things like this, Doc. You just can't tell what might happen. Suppose that crazy loon had decided to shoot all of us there in the cabinet?"

"He was desperate enough to do it," said Faylen.

"Suppose he'd of shot you and then ducked before we could stop him," said Johanssen. "Think of the spot *we'd* have been in—trying to explain how you got shot with Maury's cannon."

"I'd have been a bit cut up over that myself," said Moorhead, marveling that men with the universe open to them should be so tautly chained to mundane things.

They went upstairs and, at the door of the building, Faylen said, "Glad you dropped in on us, sir. It's been an honor."

"I'd like to do it again," said Moorhead, wondering how he could manage to spend the rest of his life peering through at the past. "I'll be good next time. I promise."

"Scout's honor?" asked Johanssen with a leer.

"Scout's honor," pledged Moorhead. Walking back across a studio lot over which twilight was falling, he salved a limping sense of honor with the thought that he had never been a Boy Scout in his youth. For he knew he couldn't hope to keep any such pledge.

THERE was no need to do anything radical. Just a little nudge in the proper spots would relieve the world of most of its age-old miseries. Attila could be made to fall from his horse before he and his Hunnish hordes reached the Rhine. Genghis Khan could be easily eliminated in Tatar tribal warfare before reaching Earth-shaking eminence. Joan of Arc need not be burned at the stake. Early checks in the careers of Napoleon, of Hitler, of Lenin and Stalin, would surely make the world a far healthier, less neurotic home for humanity.

He churned over the most propitious possibilities as he walked back to his air-conditioned mausoleum, all memory of past failure and frustration forgotten. For here was an opportunity that no true member of the human race could conceivably refuse. Here was the chance really to help—what's more, to help people by means of people-invented instruments. Truly the long-sought Operation Bootstraps!

By the time he reached Marlin Zandor's mansion, high in the hills above the city, nestling securely, decoratively, in its own wrapping of landscaped greenery, doubts were beginning to assail him. He wondered whether he, or any one man, had either the right or judgment for such appalling authority. Zandor's brilliant, pragmatic brain, he decided, would offer a nice balance to his own more emotional, more idealistic thinking.

Informality at the Zandors' was, surprisingly, almost that. At table, there were only six: Zandor, his wife, their daughter of seventeen years, their son of fourteen, a school friend visiting him for the holidays, and Moorhead. If there were a few too many servants, if the meal was a trifle too perfectly prepared and presented, if Mrs. Zandor's charm seemed to have been blasted on with a paint-gun—well, Moorhead had no real complaints.

The intensity of his own desire to come to grips with his vast new prob-

lem, alone with Zandor, troubled him far more than his host's family. He felt immense relief when, after the youngsters had gone about their business of the evening and Mrs. Zandor had superintended the serving of coffee and liqueurs in the living room, he found himself alone again with the studio general manager.

He studied his host over the glowing tip of a fine Havana and said, "Marlin, I discovered something this afternoon that I'd like very much to discuss with you."

"Of course, Willis," said Zandor. "But what say we look at a few of today's rushes first? They should be ready by now." He rose quickly and led the way to a small but luxurious projection room at the rear of the house, overlooking the inevitable swimming pool.

And Willis, well aware by now that the showing of vidar film preceded and usually precluded all other topics in Hollywood, had no alternative but to follow and settle down in a cushioned chair beside the man who was really his employer.

There were shots of a new super-Western in the process of being made. Watching them, Zandor occasionally spoke into the voice-tube of a tape-recorder at his elbow. Once he held up the shooting to make a call to the director, suggesting a change.

Then he had rushes run of a science-fiction film, also in the works, and again had comments to make on it, memoranda to record. Finally, he turned to Moorhead and said, "Sorry, Willis—I had to get these out of the way before we got to the André epic."

"That's the one I wanted to talk about," Moorhead told him.

"I rather thought you might," said Zandor. "Here we go."

There were a number of shots taken that day on studio sets—mostly revealing remarkable cleavage on the part of Lori Ames, CTV's current blonde bombshell. At one point, where, in the role of a proud Manhattan beauty, she

was in the process of spurning Sir Henry Clinton, Zandor chuckled and said,

"You'd never think, to hear her, that she was born Zobelias Arkins in Ash-tabula."

"You'd never think, to hear her, that she was ever closer to New York City than a penthouse suite at the Savoy Plaza," said Moorhead. Zandor chuckled again and motioned him to silence.

THEN, without warning, Moorhead found himself again looking at the incredible vista of nocturnal eighteenth century New York from a ruined doorway on the east side of Lower Broadway. He felt excitement grip him as he saw the same patrol pass by, the same break-up of the council at No. 1, the same return of Benedict Arnold, limping through the night to No. 3, the same appearance of Sergeant Champe from the alley mouth between the houses, the same

Then the lights were on and Zandor was speaking softly. "Willis," he said, "I can't blame you for what you did. I can only praise Allah no damage seems to have resulted from it—as far as we can tell. And try to prevent anything like it from happening in the future."

"But good Lord, Marlin," said Willis, "don't you realize what those two crazy geniuses of yours have got hold of? Haven't you any feeling of responsibility for the possibilities of time travel, of its benefits for the world?"

The studio manager looked years older as his gaze met Moorhead's questioning regard. He said, speaking more slowly than was his wont, "I think I'm as aware of responsibility as you are, Willis—at least in this instance. When I first found out what the boys had, I nearly went out of my mind. Here was a chance to eliminate every villain in history before he could get started.

"But I looked into it first, as much as I could," he went on solemnly. "And, Willis, do you have any idea of what tampering with the past could do to

the present? It could mean that none of us would ever be born."

"Poppycock," said Moorhead. "We're here, aren't we?"

"Are we?" countered the other. "Sure we are—as long as we don't tamper with the past! If we did, we might still be here—but we can't be sure of it."

"That sounds like casuistry to me, Marlin," said Moorhead.

"And what does time travel sound like?" Zandor asked inexorably. He went on to explain, step by step, how he had at length decided that the only reasonable use to which he could put the amazing Faylen-Johanssen invention was process and research shots for historical CTV epics.

"If we turned it over to the government, what would happen?" he asked rhetorically. "By the time the politicians and viewers-with-alarm got through laying on restrictions it would be tied up worse than atomic energy was after World War Two. And, if that could cause a Cold War, think what any threat of control of the past might do. I confess, the prospect appalls me."

"Surely there must be some way of using it for the benefit of humanity at large," Moorhead protested. "You—we—can't just let it lie there, with all its possibilities, being used for such a piddling commercial purpose."

"Some day, the time may be ripe for it," said Zandor. "You and I—we've got to be hard-headed pros and wait until that time comes. Meanwhile, just be thankful you didn't do anything this afternoon that might have set history on its ear."

Moorhead, whose dreams of beneficial grandeur had shriveled notably under the bombardment of hard fact to which the studio manager had subjected them, sat up with a gasp of sudden alarm. "But I did!" he exclaimed. "I did do something. I gave Sergeant Champe Faylen's automatic when I pushed him back."

ZANDOR did not answer in words. Instead, he pressed some hidden mechanism which started the rushes moving again. And, again, Moorhead found himself looking at ravaged, Revolutionary Broadway.

But this time the view was a little different. It seemed to come from above and a trifle outside the doorway, to be facing downtown rather than west. A fine view of the ramparts of Fort George and, to the right, of the ship-laden bay beyond was visible.

On screen, he watched Arnold enter his own house, well to the right edge, then saw Sergeant Champe move into focus as he crossed the cobbles. He saw the sergeant hesitate, then duck into the doorway and disappear; saw the Hessian patrol appear, heard them begin to curse at loss of apparent prey.

This time the picture was not shut off. Instead, moments later, the green-coated sergeant was thrust again onto the cobbles. He held Faylen's automatic

in his right fist and brandished it at the German soldiery. Then he stopped, looked at it angrily, cursed and hurled it away. Shortly afterward, he was led away for questioning by the Hessian patrol.

"What the devil happened?" Moorhead asked as the lights came up in the projection room to reveal an empty screen. "Why didn't he shoot?"

"I asked Faylen the same question by phone this evening," said Zandor, eyeing a fresh cigar appreciatively. "He says he kept the safety catch on. The pistol was just a useless hunk of metal to your friend." He watched Moorhead rise woodenly from his chair, rose likewise and added, "You'd better get a good night's sleep, Willis. It's been an exhausting day."

"That's right," said the new CTV President. "A very hard day." He saw relief in Zandor's eyes as he left. Zandor knew he would not rebel again—and so did he.

IMAGINATION

Can imagination act
Perpendicular to fact?
Can it be a kite that flies
Till the Earth, umbrella-wise,
Folds and drops away from sight?

Miles above the Earth we know,
Fancy's rocket roars. Below,
Here and Now are needles which
Sew a pattern black as pitch,
Waiting for the rocket's light.

Poet, steer your rocket down.
Lights are useless, though they crown
Half of space with glory, yet
Leave this hard old globe in jet.
Earth's the start, the end of flight.

By **PHILIP JOSE FARMER**

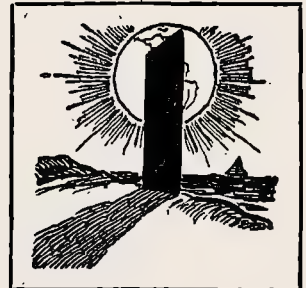


Illustration by
PAUL ORBAN



"A glass of wine, perhaps?"

The Masters

By THEODORE R. COGSWELL

SO heavy!" groaned the last earth-man to himself as he laboriously pried up a heavy flagstone with the butt of an old halberd. "So very, very, heavy."

As the flat rock finally toppled over,

he bent down, with all the speed his complaining back would permit, and grabbed a centipede that was scuttling for safety. Grimacing slightly, he bit off its head and sucked out its little ration of unsatisfying juices. While he did so,

Earth still had one surprise for the conquerors from space

he nearsightedly scanned the moist ground the flagstone had covered, to see if there was anything else. But that section of his larder was empty. With a weary grunt he moved over to the next paving stone. When he had it halfway up, he saw a fine wiggling underneath. Before he could do anything about it, there was a sudden shattering of the night silence, as something exploded in the high distance. Startled, he let the halberd drop—almost smashing a toe in the process—and looked up. As he watched, there came another thundering, and, with the harsh explosions, a flickering light flood. The ragged mountains that cupped his tiny signory jumped in and out of darkness. By the time he recovered his vision the sound was almost overhead. He squinted upward into the darkness as the flashes came again, less bright this time. Then he saw a strange something descending toward him on spouting pillars of emerald flame.

"Company!" he chortled happily to himself as he tottered down the winding stairs that led to his chambers. "After all these years, real live company!"

Trembling with haste—and something else—he took his musty dinner clothes out of a great oak chest. A few minutes later he was ready, immaculately attired, a multicolored ribbon—signifying the highest decoration of the Austrian Empire—diagonally across the gleaming white of his shirt front. The little rosette of the French Legion of Honor shone modestly in one lapel.

By the time the ground around the strange ship outside had cooled enough to let its occupants emerge, the great hall was a blaze of light from hastily lighted tapers. A new fire crackled in the fireplace, and the long banquet table had been dusted and stood gleaming in the candlelight. The last of his cellar, a single cobwebbed bottle, had been carefully placed on the table. With one last glance to assure himself that everything was at its best, he hobbled to the entrance and waited, the perfect image of

a gracious host.

He felt a momentary pang of disappointment when he saw only one figure emerge from the ship, but then shrugged philosophically. He, of all people, was in no position to complain over the magnitude of windfalls. At least this night, for the first time in more years than he cared to think about, he would dine as a gentleman should.

WHEN she stepped into the candlelight, he gave a little purr of satisfaction. No thick bodied peasant this, but a patrician, an aristocrat of the first order. He stepped out of the shadows and gave a courtly bow.

"You are welcome, my dear. What little my poor house has to offer is yours."

Her response marked her as a thoroughbred. When she turned slowly to face him there was no fright, no confusion.

"How strange," she murmured. "How very, very strange. The scouts claimed to have detected night movements, but it was hard to believe. Are there more of you?"

"No, my dear," said Count Shirov sadly. "I'm the last, the very last of all my kind. But to have such a lovely thing as you to brighten my dwelling makes the years of loneliness a mere nothing."

"You are too kind," she said absently, her eyes sweeping the ruined hall as if they were looking for hidden men in dark corners. Suits of ancestral armor still stood in glass fronted cases, but part of the roof had fallen in and the great doors hung on broken hinges.

"Amusing artifacts," she said. "It might be interesting to preserve this place as a museum."

"Now it is you who are being too kind," said the Count, as he ushered her toward two chairs that had been placed very close together at one end of the banquet table. "But I am being remiss in my duties as a host. A glass of wine, perhaps? I can vouch for its excellence."

"I don't drink," she said.

"A pity," sighed the Count. "Wine and beauty belong together. But at least be kind enough to grant an old man just a sip of both."

Before she could protest, he eased her into one of the chairs, and seated himself beside her. He poured a crystal goblet half full of bubbling blood-red fluid, and held it up so it caught the light from the tapers. As he twisted the glass, brilliant little crimson flashes coruscated from it.

"Isn't it beautiful, my dear?" he murmured, and tilted the goblet slightly so the dancing light flecks caught her full in the eyes.

"So beautiful, so very, very beautiful." As his voice crooned on it became softer and softer, until it was barely audible. "So much beauty that it seems impossible to take your eyes away from it. It fills them with little wavelets of shimmering light and makes you drowsy, so drowsy that even the sparklets begin to dim away because you are so terribly sleepy . . . sleepy . . . sleepy."

His voice trailed off into silence, and slowly he began to bend toward her, his own eyes dazzled by the whiteness of her neck. And then a wave of blind hunger that he was powerless to resist swirled over him. His lips curled back to expose two incisors that were more like fangs than teeth. With a sudden animal-like snarl, he snapped at her jugular vein.

UNDER ordinary circumstances the Count would not have acted so precipitously—he had always prided himself on the delicacy of his dining—but these were by no means ordinary circumstances. After long famine, greediness, if not excused, can at least be condoned.

During the time of the fleeing men, he had eaten so well that for the first time in his life he had begun to acquire a slight paunch. What they were fleeing from didn't arouse his curiosity—he was long accustomed to the periodic waves

of madness that had been sweeping through the Balkans for as-long as he could remember.

The flight was toward the west, so it might be from the Turks. The Count didn't mind. He had always rather enjoyed the Ottoman invasions. Their half-starved fighting men were much too gamey for his taste—but the bashas—ah, the bashas!

But then one night came the first of the green clouds, small puffs of glittering light-points that moved as if they had an intelligence of their own. And then more, ever more, darting through the passes and up over the mountain meadows, searching, ever searching until they found what they were hunting for. Then there were swift swooping dives and a clustering on twitching two-legged or four-legged things. When they left to hunt again the vultures came, and after them the rats and crawling things.

And then the green clouds themselves were gone. Whether they died, or ran out of fuel, or just evaporated, Count Shirov didn't know—and, didn't care. By then he was too hungry.

Something had happened to the balance of things. There were more lichens and toadstools than there were honest grasses, and leaves crinkled and grew brown before their time. Soon there was little left for decent greenness except long streamers of Spanish moss hanging from the dying trees.

The Count didn't adjust to the new order without protest. There had been a time when only the blood of the most beautiful of village virgins had been considered suitable for the breaking of his fast. Now he was reduced to vultures—not without a great deal of initial gagging, however.

More than disgust was present. There was also pain. Vultures have an unfortunate predilection for perching side by side on the highest branches available come nightfall, and neither the Count's dignity, nor his aging muscles, were equal to the laborious task of climbing

up after them. As a result, night after night he was forced to go through an agonizing metamorphosis and sweep through the night air on black bat wings to where his breakfast slumbered.

Popular tradition to the contrary, changing form is an agonizing process. There is a melting and a twisting and a shoving, a compressing of delicate nerve endings that is so painful that, except for an initial trying of his powers when he was young, and one or two emergency escapes from angry Transylvanian villagers, the Count had been content to keep his normal shape through the centuries. Now he had no choice but to put himself on the rack twice nightly.

Unfortunately for him, however, although he could survive on a diet of vulture blood, they couldn't keep alive without adequate rations of carrion. When the harvest left behind by the green clouds had all been gathered, there was nothing left for the naked-necked scavengers. They grew wan and thin, bundles of feathers stretched tight on stick-like bones. And then there were none.

The Count almost starved again before he learned to look under rocks. The many-legged things still bred and flourished—but it took so many of them, and the stones were so very heavy.

And now

SHE DIDN'T move as he struck. Already savoring the richness of the hot arterial blood, he snapped expertly. The results weren't quite what he'd expected. A sudden wrenching pain stabbed through his mouth, and then he found himself hurled to the floor. He sprawled for a moment, half stunned, and then, shaking his head to clear it, he pulled himself to his hands and knees and looked up at the girl, who was standing over him like an angry goddess.

"You lout," she hissed, "You've chipped my enamel!"

He pulled himself groggily to his feet and looked. Sure enough, where his teeth had raked the adamantine surface of her neck, bright metal showed

through scratches in the flesh-colored covering.

In spite of his loosened teeth and aching jaws, Count Shirov remained the gentleman.

"A thousand pardons, my lady," he said. "I didn't dream that such beauty could be counterfeit. Surely you can't blame a poor old half-blind man for failing to penetrate such a perfect disguise."

"I can and I do!" she said angrily. "If one of the Masters had come upon you before I did, you might have injured him seriously."

She drew a long rod-like mechanism from the loose folds of her tunic, and pointed it at the Count.

"How you managed to escape the exterminators, I don't know," she said. "But be that as it may, your end is overdue."

"Perhaps these exterminators didn't have the right equipment," said the Count, shrugging politely.

"Nonsense!" she said sharply. "The plans were too carefully drawn. Every major life form on this planet was taken into account." Her eyes narrowed. "But this one small oversight can easily be rectified."

"As you will," said the Count. "I have lived so long already that death is a meaningless term to me. But wouldn't you have the kindness to let me finish one last glass of this most excellent and irreplaceable wine?"

She nodded impatiently. "But be quick about it. The Masters will soon be here. It will be fitting that the place which marks the last of the old shall also mark the first of the new."

The Count sipped his wine slowly.

"Tell me," he said, "the Masters, are they all like you?"

She seemed shocked at the thought.

"Of course not! I am a Servant, a machine built to do their will. I was one of those specially prepared to come in advance to clear this planet of all forms of noxious life, so that it could become a fit dwelling place for them. Now that

that has been done—except for you—the Masters have been summoned. Their ships are outside atmosphere now, waiting for sunrise so that they can land.”

COUNT SHIROV looked down into his glass. There was one sip of wine left. “My lady,” he said humbly, “it has long been a custom of this planet to give a condemned man a final wish.”

“We are not bound by your customs,” she said coldly.

“I know, but this is such a little thing, an old man’s whim. Wouldn’t it be possible just to look at one of the new masters before I die?”

“Impossible! It is still an hour before sunrise, and I must remove you before then.”

“But if just one ship could land ahead of time.”

She gave a scornful laugh. “Don’t be absurd. You know that it is impossible for the Masters to . . . But of course you couldn’t. You would have no way to.”

“To what?” asked the Count, letting a note of genteel curiosity slip into his voice.

“I am conditioned against giving that information,” she said primly. Keeping the rod-shaped weapon pointed at him, she looked around the hall again.

“Where does that lead to?” she asked, gesturing toward a shadowed archway in the far corner.

“To the cellars, my dear.”

“That will be as good a place as any,” she said, and pointed toward it with her weapon.

Count Shirov rose to his feet and lifted his glass.

“To man’s past,” he said softly, “and the Master’s future.” Draining the last swallow of wine, he crashed the goblet into the fireplace.

“Your servant, my lady. If it must be done, do it quickly. Dawn is not too far away and I am allergic to sunlight.”

As he walked toward the vaulted stairway he seemed more a gallant ushering his lady to her opera box than a condemned man being led to his death. He

paused at the entrance and looked at her enquiringly.

“Keep going!” she snapped.

He bowed and disappeared into the darkness.

She waited until the sound of his descending footsteps had almost disappeared, and then pressed a stud on her long rod-like weapon. There was a soft hiss, and from the tip a green cloud of tiny light-points appeared. It circled for a moment as if picking up a scent, and then darted down the stairway after Count Shirov.

It was bright morning outside, and the first thundering of the descending ships of the Masters could be heard, by the time she descended into the crypt. For a moment she thought he had escaped, but then she found him. He was dead. She knew the signs. Satisfied, she dropped the lid on the long black box and climbed the winding steps back up into the great hall.

Her mission completed, the last of the Servants pressed a button concealed in her navel and permanently deactivated herself.

KAR KLEN, the royal physician, looked nervously out the window. The sun had almost dropped behind the peaks, and his quarters were all the way across the central square.

“You aren’t listening to me,” said a complaining voice.

“Oh, I am, my lady, I am! I was just trying to decide which of my many remedies would best combat this strange sickness of yours.”

“You’d better come up with the right one this time,” grated the Princess Royal, “or this court is going to have to get along without your services. And,” she added, clicking her mandibles noisily, “the Queen Mother is going to have a new week husband. I’m sick and tired of waking up every morning so exhausted that I’m barely able to crawl out of my web.”

A green globule of nervous perspiration oozed from Kar Klen’s ventral pore.

"This time I'm certain to find the remedy, my lady," he said and began to back toward the door. "And now, if you'll excuse me, the shadows are already long. If I don't hurry The Sleep will catch me on the square. I will wait upon your ladyship the first thing in the morning."

"You will not!" she snapped. "You'll keep right on working here until you've compounded my medicine for me. I'll have a servant with a sleep-dispeller light you home when you're through."

"Yes, my lady," said Kar Klen in unhappy submission, and opened up the case containing his pills and purges. As it darkened outside he began to yawn in spite of himself.

"Turn on the lights, you fool," growled

the princess. "The Sleep is almost on us."

Kar Klen clicked a light switch and overhead a great bank of sleep-dispelling ultra-violet lamps filled the room with their protective radiations. Turning back to his case, he looked at bottle after bottle, in a desperate search for the remedy that would cure the Princess of her persistent anemia, and save him from the hatching pens. But since vampires were unknown on Alpha Centauri, he never thought of looking in the obvious place, an ancient crypt beneath a ruined castle. There the last earthman slumbered through the bright sunlit hours, a happy smile on his full red lips, and his aristocratic hands folded over a small but nicely rounded paunch.

THE READER SPEAKS

(Continued from page 8)

as female suffrage, with its concomitant co-education, cooperation, companionship, etc., although the inertia of the old way is, simply, fantastic. But who, save the insecure, frustrated, or frightened individuals among us men, would swap the modern ideal of the complete consort: rational, reciprocal, intelligent, capable, self-reliant, and honest: for the old-fashioned Priscilla, the inconceivable creature who "thought different" from Men because she lived in a subhuman subworld of self-pity, martyrdom, one-track interests, desperate dependence, drudgery, neurotic prudishness and stifled self-expression?

You want a girl who won't assert her own, conflicting ego, who won't say no because she doesn't care, who "belongs" to big you? What are you scared of? Afraid she won't choose you of her own free will, or worse, might change her mind afterwards? Fifty years from now, you'll have to go a lot farther than Japan or some bombed-out, manless European country. Maybe they'll have robots by then, hm?

In other words, our "modern" supervirgin, the gal everybody gets indignant about because she's "all mixed up," is actually undergoing an adolescence undreamed of before this century. Maybe later there'll be some sort of tactic or ethic, similar to the code of any self-responsible young bachelor (me, for instance) who can conduct, in his mind, at least, a modern relationship, that the modern miss can follow in her maturing years. Complete abstinence is ridiculous, as is compulsory dehyemization at any specified point.

So I differ from M.Z.B. after all I think, once we get this "little ladies and gentlemen don't act that way" idea out of our mothers' heads, that any given girl has just as much right as any given boy

to assume a private and individual responsibility towards sex. You made a point about this being a real tabu-tabu society, Mines; I wonder if anyone ever drew the obvious correlation between confirmed alcoholism in alcohol-tabu and alcohol-sowhat societies (e.g., this country or Sweden vice France or Italy) and sexual maladjustment in corresponding culture variants (not necessarily the same nations, tho it seems to follow.) For the record, US alcoholics number about 400% per capita over France's.

A friend recently wrote from Tangier, where he fled to become a true poet; that "over here the norms are all different—sometimes it gets confusing as hell!" Being a pretty representative American type, except for a preference for Pound and Patchen over Kenton and Cadillac, the lack of social pressure for sex or against sex or sideways, left him reaching for a stair step that wasn't there. The big thing about these Bohemians and our ludicrous Puritan-Pioneer-the-Hell-With-Everything ersatz variety was that the Tangier type live fulfilled, productive lives, and ours oh well.

I was, I think, going to say something about contraception. Mrs. Bradley: if the young girl, as a responsible member of an embryonic and vulnerable family group, has not the capacity to decide about pros & cons of pregnancy & its benefits and possibly crippling harm, don't you think she oughta hold off until she can figure it out, like you? (Moreover, if we're ever to have real hands-across-the-sexes stuff, a girl who becomes enciente while attempting to employ the complete equality idea ought to have her head examined. You don't have to if you don't want to, as they say, but if you want to, make sure you don't have to.)

Hope this isn't too heady for TRS. I'll take it amiss if somebody says I'm dirty-minded.—937½ S. Serano Ave., Los Angeles, 6, Cal.

Nicely enough put, though it sounds to us as though you have just discovered that stone walls, a prison do not make. Or that only by removing controls do you control. And that the only way to hold something is to set it free and so on. Of course by this point in the argument we are a little confused as to what everybody is arguing about, but this is a natural condition in TRS.

THE ULTIMATE WEAPON

by Norman J. Clarke

Dear Thrilling Wonder: What's mine is yours (25c) and what yours is Mines. Which seems like a fair enough arrangement. The shorts in the Spring TWS were pretty good—one Big Theme. (One More Chance), one Western set on Mars (the bullet ploughed into the sand with an angry hiss . . . and HERE COME THE INJUNS!) and one detective story with an ending which was only visible about a block away. I am afraid to read the longer stories. Being longer, the potentialities are greater. I could pretend, though, that I have read them and make comments (phooey! Switch those letters around, somebody) like: "The Winds Shine at Night had a good title, story was a little forced, plot a bit familiar, etc.," and nobody would know that I hadn't read a bit of what I was reviewing. This little trick is not my own, however. Everybody does it.

Sam—your editorial shocked my eyelids open. So that's why I've been feeling like this lately! I have "blue tongue"—a rather pretty shade of blue, though—and I think I have "scrapie," or scraping together at the ankles, and if vesicular Examthemata is characterized by falling eyebrows, I've got it. I also have "Hard Pad" but this only occurs in the shoulders of my (1) suit and in my saxophone keys.

Maybe Mercury isn't hopeless, but the Mercurians definitely are. Living on Mercury, we would have to stay in the dark, or rather in the dim. I know some people who would make perfect colonists.

Well, so much for the fillers—let us get on to the meat of the magazine—namely, the advertisements—oop. I mean the letters. Goodness. Everyone is so apathetic, or maybe just pathetic. No guts all over the place. H. Maxwell hates intellectuals. That's me. I hate you, too, Max. Cordially.

John Courtois hates fans. Fooey. I think they're as much fun as politicians. Who needs a zoo with fans and demagogues around?

I am wondering if it isn't verging on poor taste for someone to drag in his or her sex problems, and how they handled them? I mean about decisions between husbands and wives with regard to their fidelity which are displayed for all the world (meaning Fandom) to see. Soon I expect to see a letter in TWS or SS captioned "How I Evaded Seduction" by Flueella Fanette.

I have a couple of answers for Richard (the

Lion-) Harters pugnacious assertions: 1. There is one method of birth control which is absolutely reliable. Let's us fans get together next week and invent the Ultimate Weapon, and use it to enforce segregation of the sexes—except for fans and their fems.

2. I quite agree that colonization of the solar system is impractical. First we will have to build a spaceship.

I will argue with anyone who thinks that there is something worthwhile in Fan Clubs.

In a final burst of enthusiasm, let me recommend/recommend/recommend/recommend advise you to buy "Impressions of Outer Space." Just heard it and it's a gasser.—411 Mayfair Ave., Ottawa, Ont., Canada.

Do you wake up in the morning feeling as if you had two heads—then look in the mirror and discover that you have?

Could be the DDT on that lettuce you ate last week. And Vesicular Examthemata is serious in the young. But we have the name of a good veterinarian for you, Norm, just write and ask.

TRS-being a place for fans and others to let down their hair if they feel like it, we have never been surprised to find problems like sex and marriage and fidelity creeping in. These are problems of human adjustment no less than finding a job or getting along with the neighbors. And our attitude toward all problems is that it is better to discuss them than bury them.

As to the question of taste—there are limits, naturally, as to how personal you want to get in public, but regarding them simply as a category, we find these problems no less relevant to life than the advance intellectual problem's another class of thwarted citizens are always worrying about. There's a limit to anything, we agree. And stop worrying about our competing with the confession magazines. You'd be surprised how many letters from Flueella Fanette we've killed.

TOO MILD

by the Rev. C. M. Moorhead

Greetings: What in the world has happened to TWS and SS that they have gone quarterly? "What a revoltin' development that is!" And just when the letters to the editor were getting really good, you had to go and pare down that section too. I'm really more interested in the letters than I am in most of the stories. And then you go and cut the best part down to a shadow of its former self! Patooiie!

I'm sorry you left out my reply to Tom Pace in the winter issue of TWS. I note in your editorial in the letter column TEV of the Spring issue of SS a remark that some of the letters are libelous.

SURELY my letter wasn't in that classification! I didn't say Tom Pace was a jackass; I merely said he sounded like one, and that I hoped his stint in the army would tend to shorten his ears so he would look more human. Tsk. Tsk.

The last batch of letters in TEV of SS certainly were mild. Where are all the old-two-fisted, snarling letter writers? Where are all the old-timers? Are you starting a new policy, Sam? Oust all the old-timers and give the new-comers a chance? OK with me as long as the new-comers have fire in their eyes and belch smoke from their mouths.

Looks like the women are having their day. That letter by Marion Zimmer Bradley "La Guillotine" had me batting my eyes. I wondered too, what she meant by a "swift kick to the seat of woman's mass-produced slacks"? Is she one of those women who like their men big and rough? The cave-man type, eh? But let a man get tough, and they begin to holler bloody murder! I think it is all in their heads. So she wants the feathers to fly. I'd laugh if no one mentions her letter except me. I'm fool enough to stick out my neck against anybody, even a woman!

Well, I've said my little blurb for now. Please note that I am no longer roosting on that limestone rock in Lake Erie, namely—Kelley's Island. I've moved over onto the mainland with the rest of the sane people. I'm beginning to feel almost sane myself.—Box 171 Bettsville, Ohio.

One thing you can be sure of in this section of the mag—if you are looking for a fight you will find plenty of characters willing to oblige. We were kind of deflated to hear that TRS was only a mild shadow of its former self, so we dug up a lot of back numbers and browsed through the letter columns and, sure 'nough, even while the most violent battles were raging, somebody was complaining that the pace was too mild and where were the fire-eaters of yesteryear? Do things always look better in recollection? And is age creeping up upon us and the Rev. Moorhead? Hang tight, you'll get your fight.


OF NUMBERS

by Jean B. Tuckerman

My Dear Mr. M! The Spring issue is good all over. Second-rate Merwin, but we know that he can, and does, do better, so it's okay this time. "One More Chance" rate, with Damon Knight's "Not With a Bang"; finally a "Last Man" tale that doesn't lionize the human personality.

When you first took over as helmsman of TRS, your editorial "we" slipped now and then, but you've had an almost perfect score of late. Perhaps we should revive the old Anglo-Saxon forms for "we two" and "ye two" for purposes of fan-editor badinage? The hitch here is that no one seems to have authorized the number that the editorial "we" represents. Can anyone enlighten me on that problem?

Speaking of SF in modern life, what about the
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HI-FI systems with automatic compensation? One could build a story about that. —66 Madbury Road, Durham, New Hampshire.

What manner of praise or insult have failed to do, this cunning question has devastatingly accomplished. We are unhinged.

How many does the editorial "we" represent, indeed? This is a problem which, happily, had never occurred to us. We were content with its vaguely collective anonymity. Now our peace is destroyed forever. Anybody got the answer?

TRIVIA AND SUCH

by Dick Clarkson

Dear Sam: I was worried; I thought I'd never get hold of a typer to write in about the Winter ish of TWS. I'm temporarily marooned here in Baltimore, and like a fool I left my typer in Cambridge that never helps. I had wanted to write sooner, too, since you had a great story lineup this time.

I would have thought Crossen more original, however. No, the story was up to his par, which is par excellence (missed!) but the crack-on-the-cranium idea, causing-all-sorts-of-interesting-things-to-happen-to-the-hero is far from original with KFC. I was hoping for some really startling new idea for endowing Manning with his second mind shield. But if that's all it takes, I will set me up in business for a reasonable fee, I shall undertake to supply my clients with konks on the koko, guaranteed to produce a secondary mind shield. I have all sorts of blunt instruments handy, and as a special favor, Sam, I'll give you reduced rates. Take off your hat when I arrive; that's all as is necessary.

Leinster's novel reminds me of the old Merwin Leinster; back in 1949 I remember a particularly lurid novel he wrote, full of thud-and-blunder akin to this. Not quite so spectacular, but very fast moving. The short stories were all solid, entertainment; none caused any revolutionary brain-washings in me, but all were enjoyable. There was one too many, though; you didn't have enuf space left over for a decent letter column. One of the shortest you have had in a long time. I'm still wondering how MIT would ever admit anyone who used framp. . . shows a particular mentality which is unsuited to the pursuit of trivia-like math and engineering. Other than that, the letters were more or less of the usual run, with the astounding exception of Marion Bradley: Luckily, she doesn't happen to be Einstein, an electric computer, Margaret Chase Smith and Madame Blavatsky all rolled into Dr. Kinsey. . . if she were, the letter would probably have been further from saying the worthwhile ideas that it did. I won't reiterate her words, but I would like to give her a pat on the back. There is a big difference between attitudes towards sex, but it seems there are too few with any kind of solid, clear-headed approach to it. One big trouble, which may have caused a lot of this misemphasis, may be the commercialization of sex. It's being played up BIG wherever someone can squeeze a buck out of it.

Like the same which has been done to a large extent with Christmas. When something like that is commercialized, you get all kinds of weird results. El señor Don Dinero, the long green, can come into the wrong picture here and there.

Before I go, two quick beefs. No trimmed edges yet on TWS, and for Ghu's sake, get it back on a comprehensible schedule. I used to be able to predict within a couple days when SS and TWS would appear on the stands; now I'm off by a week and sometimes a lot more than that. Wot gives?—410 Kensington Road, Baltimore 29, Md.

Any fee you would charge, Clarkson, would be unreasonable. In fact, we'll even go so far as to guess that any service you might supply would be unreasonable. Back to your bottle at Harvard

MORAL DICHOTOMY

by Bob Arentz

Dear Sam: Your comment on the Tom Condit hypothesis brings to mind the thought that the silly Victorianism he berates laid the foundation for the last half century of Industrial expansion and the growth of the Anglo-American cultures. Whereas the moral dichotomy of Victorianism, as you mention Rome, was a dying nation—profligate, sensual, debauched and soon dead. The warring Rome that fought and created both empire and Pax Romana was not the amoral culture that blew its own brains out later. on—Box 2278, Salt Lake City, Utah.

Mebbe so, mebbe so. You drive us back on our favorite phrase: autre temps, autre mores. You would have considered the early Greek civilization sensual and debauched too, yet it was the most vigorous and growing culture of its time. The Romans took it over because they were more material, less imaginative, more grim and dedicated, just as the Puritan mind overrides the artistic, just as the Nazi mentality overrides the democratic. And each age decides for itself what is debauched.

SHAMROCK TIME

by H. Maxwell

Dear O'Mines: So I am after reading a fine letter by the Bradley herself and 'tis enjoying myself I am, what with her philosophizing and all; and I'm just getting to thinking that with people like her doing their bit of honest self-gandering now and then, why, maybe there is the half a chance for the devilish human race after all. But then I have to go and sore my eyes by reading that spalpeen editor's comments about the matter and then after that there is no more hope in me at all, at all. 'Tis a losing race we are all running and 'tis the stupidest who'll be after leading the pack of us.

Faith and 'twas as plain as the nose on Paddy Murphy's pig what the lovely colleen was gassing about "Bejabbers," she says, "an' the women

don't stop leading 'unnatural' lives, there'll be trouble coming out of it." So yon editor, being human, ignores completely the viewpoint she is after expressing and counters with the classic human answer to all ideas which are new and need thinking about; says he, "No comment on whatever it is you are liping about, but let ME tell YOU and O'razzini is not a mcheptosud except during Lent and on Leap Year Tuesdays. So there!"

Well, if you'll be standing aside, O'Mines, I'll be after talking to the sensible lass, as one wise man to another.

You see, Maureen Zimmagh, it is ideas which move people (more than a good glass of prune juice, even). It is the thought that is mightier than the sword, the doctrine that is stronger than the emotions, the concept that overrules the circumstances. It is the point-of-view that guides the hand of the poet, the king, the carpenter, the wife, the cow in the meadow and the pig in the parlor. First comes the thought and then the action follows as natural as one swallow follows another.

And when everybody in the county is having the same notions 'tis the same devilish things they will be after. And their kids will be imitating them and *their* kids will be having kids and so there is no end to the foolishness. And ninety generations later some historian will be prating that the civilization of these people was characterized by this and that, and they had this odd fashion and that fey way and all the time him not knowing what he is talking about like the O'Mines. For 'tis the basic ideas of a people that make civilization and 'til you have gotten those ideas identified and put straight in your head, then you know nothing whatever about the people at all, at all.

First comes the idea and behind the idea you will find a man who was a great bother to himself and everybody else and hence got left alone all by himself and so had nothing, better to do than to sit and think what the matter was.

And so Christ got the idea about human brotherhood and love thy neighbor and the dignity of man which is all one idea and from this came nineteenth of European civilization including what is called Democracy, also social security and free football scholarships for lads who weigh a fast 19 stone or thereabouts.

And Marx got the idea that what he called capitalism was an awful botheration to what he called the working classes and so they ought to murder all the people who had more than two dollars to rub together. And from this came Sovietism.

And Newton got the idea that if we started measuring this and that, 'twould put sense into our heads. And from that came science and industry and them devilish alphabet bombs. Only it didn't put sense in our heads, just knowledge, which is a different thing and is anyway entirely the wrong stuffing for small heads altogether.

To understand the whole blessed mess, Maureen, you need but to chew awhile on the juiciest idea of them all, which is me own if some dunce should be asking. First comes the idea, then the civilization, then the troubled man and his new idea and then the new civilization with its new troubles and so on 'til the Lord decides to put a stop to the

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nonsense and calls "Time!" and we'll all go home and get a good eternity's sleep.

But pick up your chin, Maureen Zimmagh. Pretty soon some troubled man will think up a new idea and there'll come a new way of living from it and a brand new special set of troubles to go along with it all. And speaking of troubles brings into me head the thought of that Editor spalpeen O'Mines and this is more than me stomach can stand without me going out and buying it a stiff double-shot. So too-ra-loo, to you O'Bradley, and the back 'o me hand to you; O'Mines.—354 West 56th St., New York, 19, N. Y.

Wisht, and there's a brash lad to be tangling with O'Mines. Fancy will ye, an Irishman named after a cup of coffee. And never let it be said that O'Mines befuddled an argument with double-talk. We asked a pertinent question, which you'll see if you go back over the correspondence. Said question was: who decides? Now, O'Maxwell, if ye had tried to answer that question instead of saying, "Wisht, the man changes the subject and the frammis is gestalt on the portisan as any idiot would know," ye'd have been on firmer ground. Or is it swimming ye're after?

DENTAL PROBLEM

by John Courtois

Sugar Mines: Another day, another debt, and TWS ranks supreme. Don't ask me what all this means. I have just been reading Mystic. If you're confused, think of my pitiful plight. All those weird and highly censorable half-thoughts gurgling merrily about my cranium cavities (including three worn out teeth) with only a sprinkling of strained and purified impressions squirting out onto the paper.

I am convinced (you say yq're Sam?) that the Terrible Three would be much better with two back covers. You haven't had a good cover painting since the great Bergey left us for a Better Place where magazine artists are appreciated.

I have just turned to page 123 and have seen the greatest understatement of the past sixty-nine eons. QUOTE: Letters From Our Readers: These are letters? Old Man Maxwell froths quite well. He could make a fortune posing for the During in the three picture Before and After toothpaste advertisements. He starts out in fine form and high good humor that rapidly degenerates. Would some kind slob translate the last six paragraphs for me? I want to laugh too.

Sa-a-a-aaammmmm, you are neglecting my public. Dick Harter, one of my many worshippers, is screaming for religious controversy. So what do you do? You cut out all my cutting comments. Unlike some fen I could mention, I am not egotistical enough to make carbons of my letters. But unless my memory is playing foul tricks on me, the letter of mine that you have printed an excerpt from was the one where I smack the Christians about for several pages.

That was a veddy funny joke you told. The first time I heard it I laughed so hard I kicked three slats out of the crib and the nurse (we couldn't afford a mother) had to change me seven times. Seems like only yesterday and no pseudo-comical remarks from the captive audience.

Now it's my turn. This story was told to me by a fellow traveler on our journey to a convention in the state of penury. A man bought his young son a large fur coat with noodles on it. The young son, however, always wore the coat upside down. One day he happened to wear it to school, and the teacher (who had the habit of scratching mild Sanskrit cuss words on restroom walls) said to him, "Goodness sakesies, Ethelred, why are you wearing that large fur coat with noodles upside down?"

I forgot the last line, but! BOY! was it funny!

I would like to get serious for a moment (thus subtly hinting that you should all be in stitches by now) and give with a reply to Gwen Cunningham. Perhaps not a reply exactly, but she is the inspiration for these next few lines. There has been much debate of late in all of your mags over and about religion. I now add my long held and carefully considered opinions. The main thing wrong with all religion is the lack of free will. This remark needs explaining. There are so many religions on Earth that it is impossible to point to one and say, "This is IT" It is equally impossible to say that one is as good as another when there are so many contradictions oozing about. How can a man decide which set of ideas he should follow? We are men, you say, and should use reason. But this is impossible also. You either believe or you don't believe. There is no room for intelligence. I spent eight years in a parochial school. Every day we would have dogma and doctrine pounded into us. Those of us who didn't have nervous breakdowns left the eighth grade with a shudder in our hearts, knowing that if we ever dared think for ourselves we would be struck dead by the wrath of God.

Phui. I'm not convinced that the Catholic Church is the greatest. I'm not convinced that Christianity is the most. Mohammedanism or Taoism or Hinduism may be far superior to anything Christianity has to offer. But I don't know. I have never had a chance to study them. And that is what I'm gripling about. Every Christian religion is afraid. They are afraid that their members will balk and refuse to accept some thing as The Truth because a little man hiding behind a pulpit says it is. There is a conspiracy between the leaders of all American religions. They try to prevent the spreading of knowledge for they know that a strong and enlightened people have no need for organized religion—318 East Commercial St., Appleton, Wis.

The funniest parts of that letter were the parts we cut out, naturally, but there are words you can't use in polite society—not without being raided.

We hope you get ten million letters demanding the last line of that noodle joke. We could have spared you by cutting it out, but we're insidious too, we purposely left it in (heh).

TO EDUCATE THE PUBLIC

by Don Wegars

Sam: By this time, you must be sick and tired of opening letters that begin: "WHY DID YOU GO QUARTERLY?" so I will spare you the suffering this time. Others would ask a silly question like that, but not I. . . . It is a very legitimate question, though. Besides, you would give an honest answer. You'd probably say with a straight face that it was because of money or rising costs. I know darn well that those two are but a small part of the real problem.

I read de Camp's book on science fiction, and saw your little bit in there. You editors sure are a lazy lot if you ask me. Nothin' but just sitting around your office with piles of letters to read. And on top of that, there are the stacks of manuscripts that have to be read—or at least looked at. But when you finally arrive home at two o'clock in the morning, you sure do have an easy life.

I almost took the latest TWS for one of your competitor's mags, because of the cover I was halfway home before I saw Farmer's name. It was then that I realized that it was TWS. It stood to reason that Farmer couldn't get out of his prison to sell his stuff to any of the other mags, so I guessed it was yours. I was right by golly.

That story DAUGHTER was a good 'un, Sam. I sure picked a hell of a good time to read it, though. Just before lunch and—yep—stew! I actually didn't mind the story while I was reading it, but while I was trying to down my lunch it got a little hard. Good story, though.

I didn't read THE AGILE ALGOLIAN, simply because I can't stand Crossen's humor. I only have read two of Manning Draco's adventures before, but they were enough. Now if you had a character that was utterly unbelievable it would be better. As it stands now, I can't believe in Draco some times, and that doesn't jell right with the humor. Other people like it, I see.

I couldn't get interested in Leinster's yarn. It started out too slow; too much description right in the beginning isn't good for a story. It makes the reader feel that he's feeding a Chamber of Commerce bulletin for the planet they landed on.

All the rest of the stories were ok, except for the DREAMERS. Besides DAUGHTER, the best short was Dick's PRIZE SHIP. And then the editorial was so-so. Really, Sam, you need a sequel to it. It just leaves me hanging out there in—well, space.

Birth control, the problem of the age. It seems to me that Bradley is being a little too harsh on the ol' gals. I can't see that her letter proved anything other than making her point known to the readers. She does bring around that point again: sex is no longer the clean, wholesome thing that it once was. She's entirely right. But she leaves out one thing. America is about the only place where a person can decide for herself (or himself) what they want to do about their status. The only thing that is keeping them from changing their ways, is THAT THEY DON'T KNOW BETTER!

[Turn page]



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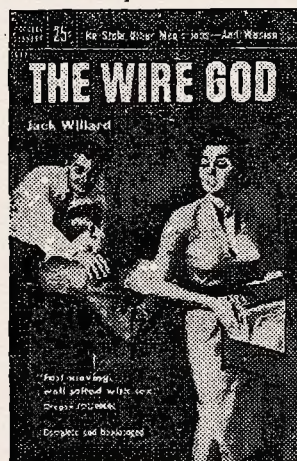
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Maybe Bradley is right, trying to educate the public via TRS, but I don't think it's going to work out any too successful. People don't want to change anything that takes time or effort. Too much trouble, I guess. One thing's for sure, if taxes keep going higher and wages don't go up in accordance, they'll be an awful lot of dependents coming into this world. It's the only way to stay out of the poor house. 'Course you could shoot yourself, but

Which brings a close to this letter TRS is showing good signs these days. It always helps when people can talk about anything they feel like talking about, Sam. Even though TRS isn't a very good place to have a discussion on Lenin-Stalin Communism, it's pretty interesting to read, and some good ideas happen along every once in awhile.—2444 Valley St., Berkeley, Calif.

What do you mean, sex is no longer the clean, wholesome thing it once was? When was it? And why isn't it now? You can't make statements like that in public, bub, without having ten thousand indignant readers on your neck.

We are a little shocked to find you consider TRS educational. And here all this time we thought we were running it strictly for laughs

THAT TEEN-AGE PROBLEM

by Jan Sadler

Dear Sam: Browsing through the stacks of back-ish that comfortably clutter my room, I came across a very shocked letter by Norman Clarke published in Nov. It seems that Normie could not bring himself around to the fact that a twelve-year old boy has opinions of his own and proceeds to express them. This hit where it hurts. Norman; hasn't it ever occurred to you that ten have children? (Or is it hens?) I, being one of this questionable offspring and all of fourteen years old, would like to acquaint you with the facts of life.

If a REAL fan gets stuck with us, we are weaned on Heinlein, told nursery stories by Crossen, can, by the age of ten, call out the correct name of the artist just by glancing at the illo or cover, and are willingly subjected to daily arguments on the plausibility of the featured novel in the latest mag. Don't tangle with this generation. Grampa!—219 Broadmoor Drive, Jackson 6, Mississippi.

Personally, we got no intention of tangling with any fourteen year olds who sound like this one. Clarke, you can have him!

We've got time for a quick rundown on the letters that are left. Janice Jacobson, 2430 Garth Ave., Los Angeles, 34, Cal. wants more Draco and also wants the issue with THE TRANSPOSED MAN. We don't stock back issues, so maybe a fan will send you one, Janice. George O'Connor, 419 Fifth Ave., Watervliet,

N. Y., bemoans the fact that he is too broke to buy SS, TWS and FSM. Tom Condit, 1454 Court St., Redding, Cal. takes a swipe at everybody—too gruesome to print. Gilbert E. Menicucci, 675 Delano Ave., San Francisco 12, Cal., is perturbed by John Courtois, says just because he got a few dirty letters he shouldn't jump to the conclusion that all fans are sex fiends.

La Wanda Fritz, Box 1545, Marysville, Cal. wants to know if Emsh and Mel Hunter are the same. Nope. Harry D. Burns, 409 E. 24th St., Chester, Pa. rises to opine that MOTHER and DAUGHTER by Phil Farmer, were objectionable—a word he characterizes as an understatement. James Chamlee, 208 North 9th, Gatesville, Tex., is willing to feud with anybody. You're not from Kentucky, are you? A/3C Robert P. Hoskins, Box 299, Brooks AFB, Texas, grumbles that the fans who want the mag to come out every week, just want to see their names in print that often. Philip Freggood, 3875 Plamondon, Montreal, Quebec wants to know if we didn't publish a story called THE GLASS MOUNTAIN in TWS about '47 or '48. Could you mean THE CITY OF GLASS by Noel Loomis? Don't see any mountains.

Rowena Pearl, 220 West 98th St. New York 25, N. Y., wants to sell a complete selection of science fiction and fantasy magazines. Paul Mittelbuscher, Sweet Springs, Mo. joins Menicucci in disagreeing with Courtois about fans, though he does say fandom is something of mutual admiration society. And stop sniffing about being in the also-ran colyum. Paul, my pencil got wore out cutting down that volume you wrote.

Lewis D. Harrell, 2538 20th Pl. W Birmingham 8, Ala. has been reading S-F over 40 years, seem to like the old space opera type better, but wants Wallie West to write the FIRST story in his Mars series. Don't worry, Lewis, the way Wallie is going at it, writing them backwards, he'll get to the first pretty soon. J. Martin Graetz, Box 4382, 420 Memorial Drive, Cambridge 39, Mass., blew in the other day. After he'd gone we found a letter from him. Graetz kid. Morgan Harris, Littlejohn Lane, Cooksville, Ont. wants someone to write him. And W. R. Kaufman, 1320 Hartrey Ave., Evanston, Ill. is just generally enthusiastic. S'nice.

So, till next time; don't take any flying saucers.

—The Editor

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